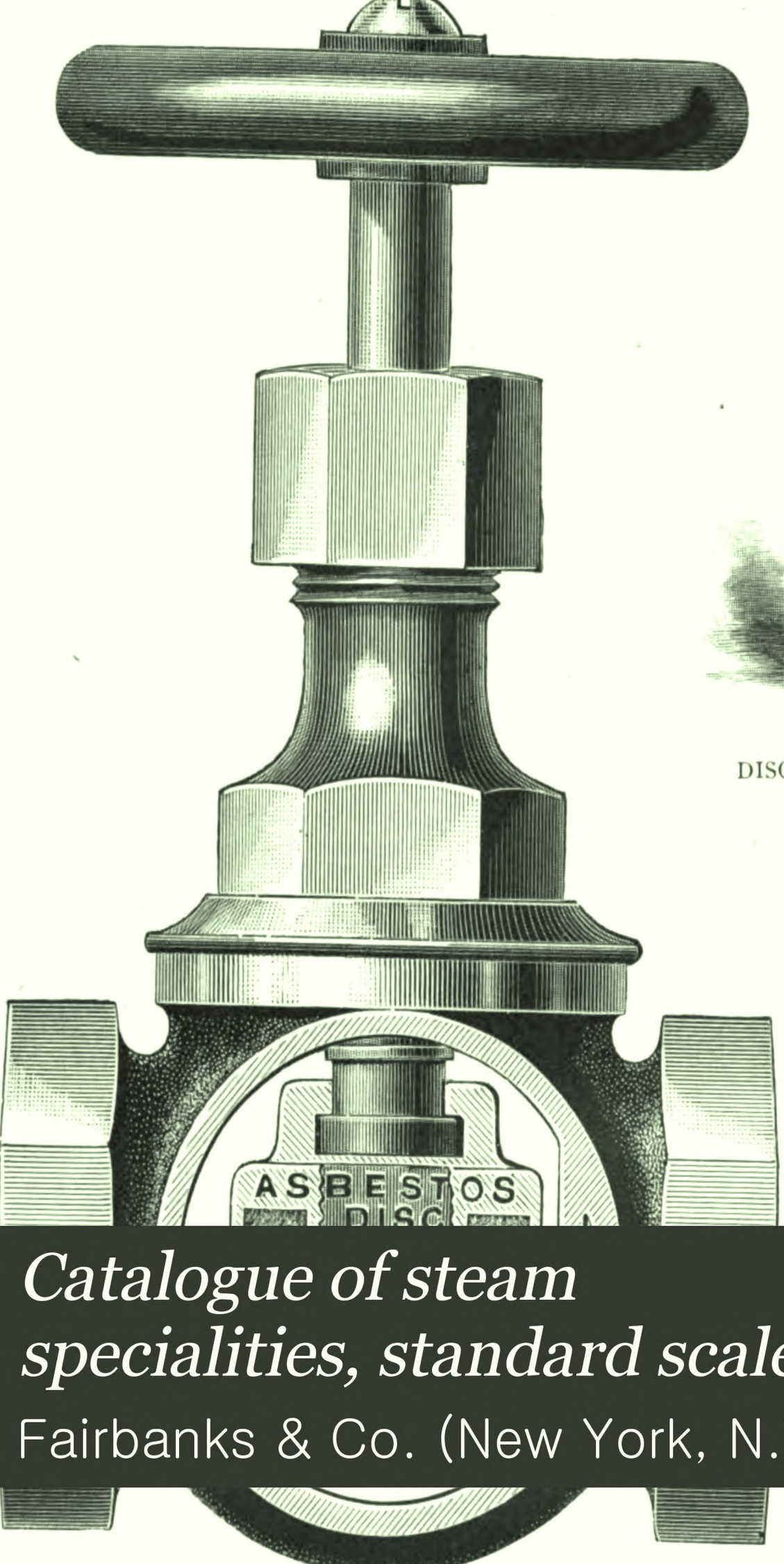

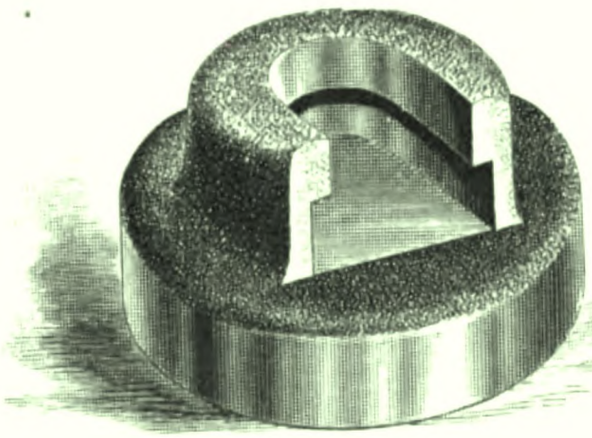

B

DISC WITH HOLDER COMPLETE
AND READY FOR USE.

Catalogue of steam specialities, standard scales

Fairbanks & Co. (New York, N.Y.)

Lawrence

ENGINEERI

No

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HARV

THE FAIRBANKS COMPANY,

SUCCESSORS TO

FAIRBANKS & Co.

CATALOGUE

—OF—

STEAM SPECIALTIES,

STANDARD SCALES,

ETC., ETC.

JANUARY 1, 1889.

THE FAIRBANKS COMPANY,

SUCCESSORS TO

FAIRBANKS & CO.,

311 Broadway, New York.

BRANCH HOUSES:

PHILADELPHIA, . .	No. 701 Arch Street.
BUFFALO, N. Y., . .	No. 216 Main Street.
PITTSBURGH, PA., . .	No. 302 Wood Street.
ALBANY, N. Y., . .	No. 382 Broadway.
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NEW ORLEANS, LA., .	No. 53 Camp Street.

THE FAIRBANKS COMPANY,

SUCCESSORS TO

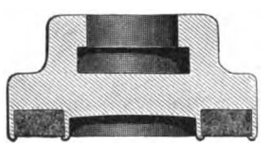
FAIRBANKS, BROWN & CO.

BOSTON, MASS., . .	No. 83 Milk Street.

VULCANIZED ASBESTOS

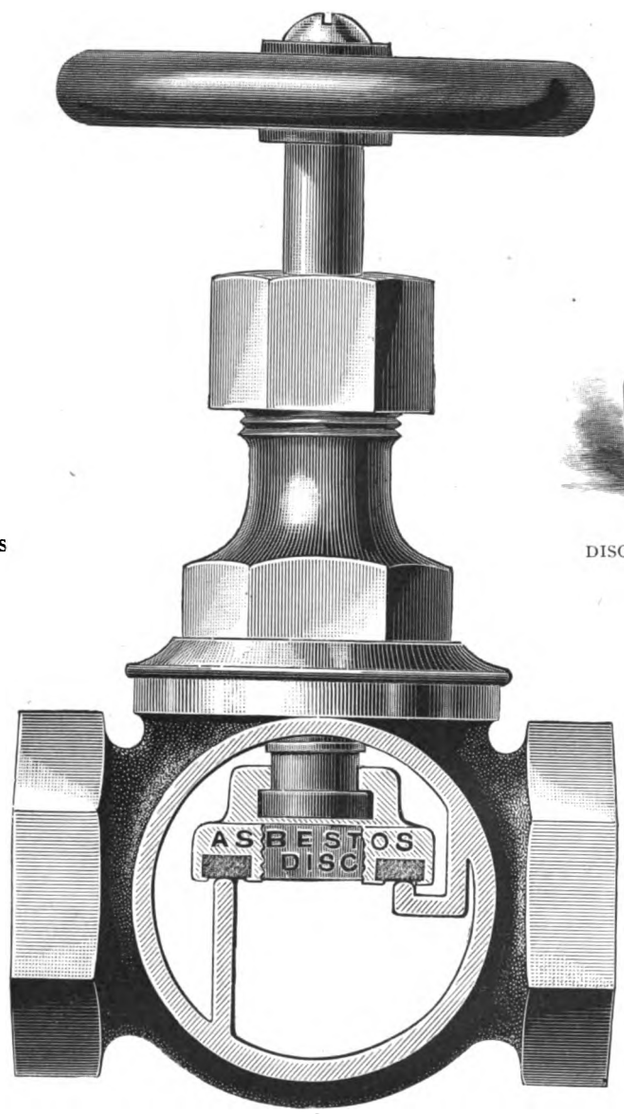
RENEWABLE DISC

GLOBE OR ANGLE VALVES.

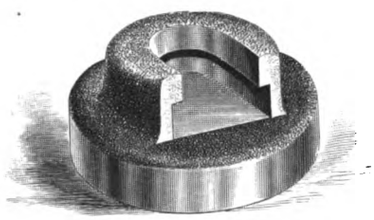


A

SECTIONAL VIEW OF ASBESTOS DISC AND HOLDER.



C



B

DISC WITH HOLDER COMPLETE AND READY FOR USE.

THESE Valves are provided with Vulcanized Asbestos Discs, composed of the fibre of Asbestos, which cannot be cracked or broken. The disc is practically indestructible, being composed of a fireproof material, to which is added the waterproof vulcanizing material. It is held central on its seat by three guides cast on the body of the valve. It is also secured to the spindle without the use of nuts, screws, pins, wires or anything that is liable to become detached while in use.

The Vulcanized Asbestos Ring is forced into the brass disc holder and the metal is spun or turned over the edges of the ring, so that there is no chance for it to split, peel or drop out.

The Discs are furnished all complete and ready for use and may be put into one of these valves by simply unscrewing the bonnet of the valve, slipping off the old disc, replacing it by a new one and screwing on the bonnet again, requiring only a few moments' time for the entire operation.

These valves have a raised round and narrow seat upon which scale grit or sediment is less likely to lodge than on the broad flat seats commonly used, and, for a globe valve, has an uncommonly free way, having but one straight shoulder and no hanging lips. The Stuffing Boxes are all packed before they leave the factory with **Vulcanized Asbestos Packing,** which is very durable and cannot be blown or washed out. Only first quality new metal is used.

We invite inspection and trial by all interested in this line of goods. All goods are warranted to give satisfaction.

INDEX.

VULCANIZED

ASBESTOS DISC BRASS VALVES.

FIG. 1.

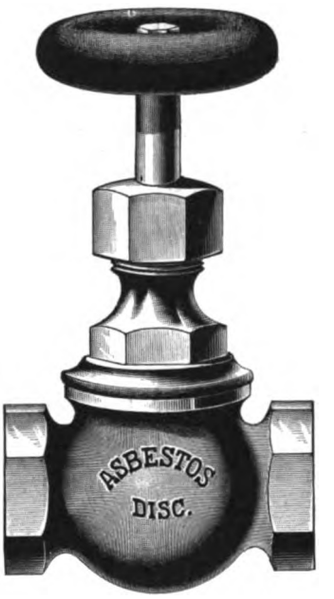


FIG. 2.

Fig. 1.

No. 1 ASBESTOS DISC BRASS GLOBE VALVES, ROUGH BODY, IRON WHEEL.

SIZES.	¼ in.	⅜ in.	½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.	2½ in.	3 in.
Price, ...	$1.10	1.25	1.60	2.20	2.80	4.00	5.50	8.00	15.75	22.00

Fig. 2.

No. 1 ASBESTOS DISC BRASS GLOBE VALVES, WOOD WHEEL.

SIZES.	¼ in.	⅜ in.	½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.	2½ in.	3 in.
Rough Body, Finished Trimmings, .	$1.50	1.65	2.00	2.50	3.20	4.50	6.25	10.50	....	....
Rough Body, Plated Trimmings, .	1.75	1.90	2.25	2.70	3.50	4.75	6.50	10.75	....	....
Rough Body, Nickel Plated, . .	2.00	2.15	2.50	2.85	3.65	4.90	6.75	11.00	....	....
Finished all over, ...	2.00	2.15	2.50	3.00	3.75	5.25	7.25	11.75	....	....
Finished all over and Nickel Plated, .	2.35	2.50	2.85	3.10	4.00	5.40	7.75	12.25	....	....

VULCANIZED

ASBESTOS DISC BRASS VALVES.

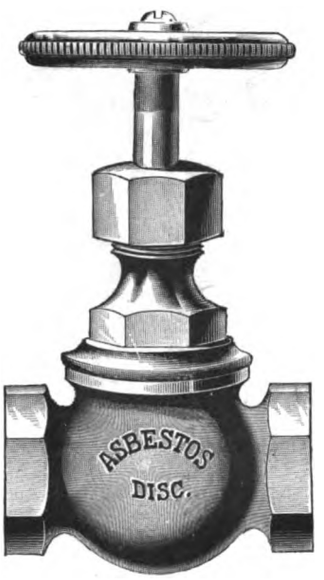


FIG. 3.

FIG. 4.

Fig. 3.

No. 1 ASBESTOS DISC BRASS GLOBE VALVES, FINISHED BRASS WHEEL.

SIZES.	¼ in.	⅜ in.	½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.	2½ in.	3 in.
Rough Body, Finished Trimmings,	$1.50	1.65	2.00	2.50	3.20	4.50	6.25	10.50	....	....
Rough Body, Plated Trimmings,	1.75	1.90	2.25	2.70	3.50	4.75	6.50	10.75	....	....
Rough Body, Nickel Plated,	2.00	2.15	2.50	2.85	3.65	4.90	6.75	11.00	....	....
Finished all over,	2.00	2.15	2.50	3.00	3.75	5.25	7.25	11.75	....	....
Finished all over and Nickel Plated,	2.35	2.50	2.85	3.10	4.00	5.40	7.75	12.25	....	....

Fig. 4.

No. 1 ASBESTOS DISC BRASS GLOBE VALVES, BRASS TEE HANDLE.

SIZES.	¼ in.	⅜ in.	½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.
Rough Body, Finished Trimmings,	$1.50	1.65	2.00	2.50	3.20	4.50	6.25	10.50
Rough Body, Plated Trimmings,	1.75	1.90	2.25	2.70	3.50	4.75	6.50	10.75
Rough Body, Nickel Plated,	2.00	2.15	2.50	2.85	3.65	4.90	6.75	11.00
Finished all over,	2.00	2.15	2.50	3.00	3.75	5.25	7.25	11.75
Finished all over and Nickel Plated,	2.35	2.50	2.85	3.10	4.00	5.40	7.75	12.25

VULCANIZED

ASBESTOS DISC BRASS VALVES.

FIG. 5.

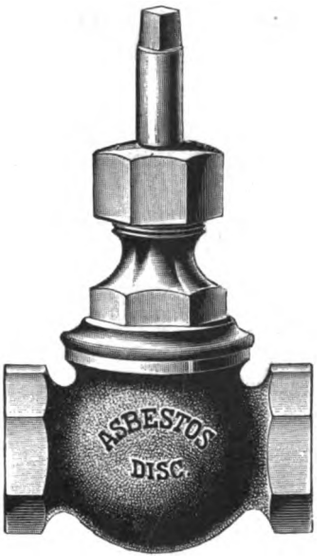


FIG. 6.

Fig. 5.

No. 1 ASBESTOS DISC BRASS GLOBE VALVES, LOCK SHIELD.

SIZES.	¼ in.	⅜ in.	½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.
Rough Body, Finished Trimmings,	$1.50	1.65	2.00	2.50	3.20	4.50	6.25	10.50
Rough Body, Plated Trimmings,	1.75	1.90	2.25	2.70	3.50	4.75	6.50	10.75
Rough Body, Nickel Plated,	2.00	2.15	2.50	2.85	3.65	4.90	6.75	11.00
Finished all over,	2.00	2.15	2.50	3.00	3.75	5.25	7.25	11.75
Finished all over and Nickel Plated,	2.35	2.50	2.85	3.10	4.00	5.40	7.75	12.25

Fig. 6.

No. 1 ASBESTOS DISC BRASS GLOBE VALVES, WITH SQUARE FOR KEY.

SIZES.	¼ in.	⅜ in.	½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.
Rough Body, Finished Trimmings,	$1.50	1.65	2.00	2.50	3.20	4.50	6.25	10.50
Rough Body, Plated Trimmings,	1.75	1.90	2.25	2.70	3.50	4.75	6.50	10.75
Rough Body, Nickel Plated,	2.00	2.15	2.50	2.85	3.65	4.90	6.75	11.00
Finished all over,	2.00	2.15	2.50	3.00	3.75	5.25	7.25	11.75
Finished all over and Nickel Plated,	2.35	2.50	2.85	3.10	4.00	5.40	7.75	12.25

VULCANIZED

ASBESTOS DISC BRASS VALVES.

FIG. 7.

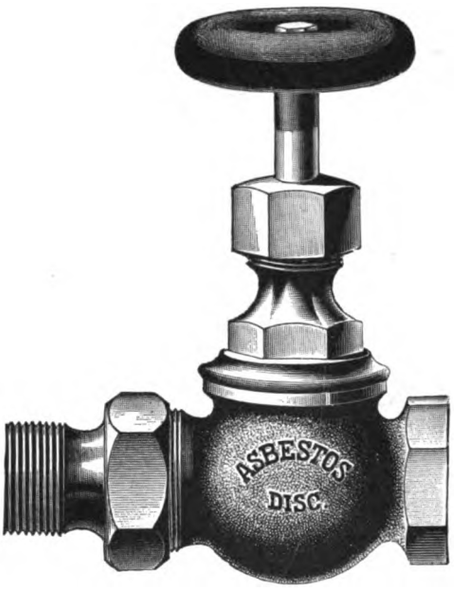


FIG. 8.

Fig. 7.

No. 1 ASBESTOS DISC BRASS CORNER VALVES, WOOD WHEEL.

SIZES.	½ in.	¾ in.	1 in.	1¼ in.
Rough Body, Finished Trimmings,	$2.25	2.75	3.50	5.00
Rough Body, Plated Trimmings,	2.50	3.00	3.75	5.25
Rough Body, Nickel Plated,	2.75	3.25	4.00	5.50
Finished all over,	2.75	3.50	4.25	5.80
Finished all over and Nickel Plated,	3.25	3.75	4.75	6.25

These Valves are made for the right or left hand end of the radiator, and can be furnished in any style of finish, right or left hand threads, or male or female union.

Fig. 8.

No. 1 ASBESTOS DISC BRASS GLOBE VALVES, WITH UNION, WOOD WHEEL.

SIZES.	½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.
Rough Body, Finished Trimmings,	$2.75	3.50	4.30	5.85	7.75	12.60
Rough Body, Plated Trimmings,	3.00	3.75	4.65	6.25	8.00	12.85
Rough Body, Nickel Plated,	3.20	3.80	4.75	6.40	8.10	13.10
Finished all over,	3.20	4.00	4.80	6.40	8.75	13.85
Finished all over and Nickel Plated,	3.25	4.25	5.25	7.00	9.25	14.35

VULCANIZED

ASBESTOS DISC BRASS VALVES.

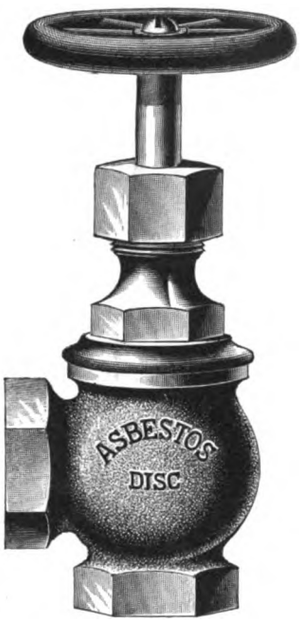


FIG. 9.

FIG. 10.

Fig. 9.

No. 1 ASBESTOS DISC BRASS ANGLE VALVES, ROUGH BODY, IRON WHEEL.

SIZES.	¼ in.	⅜ in.	½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.	2½ in.	3 in.
Price, ...	$1.10	1.25	1.60	2.20	2.80	4.00	5.50	8.00	15.75	22.00

Fig. 10.

No. 1 ASBESTOS DISC BRASS ANGLE VALVES, FINISHED BODY, BRASS WHEEL.

SIZES.	¼ in.	⅜ in.	½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.	2½ in.	3 in.
Finished all over, ...	$2.00	2.15	2.50	3.00	3.75	5.25	7.25	11.75	25.00	37.00
Finished all over and Nickel Plated,	2.35	2.50	2.85	3.10	4.00	5.40	7.75	12.25	26.00	38.25

VULCANIZED

ASBESTOS DISC RADIATOR VALVES.

FIG. 11.

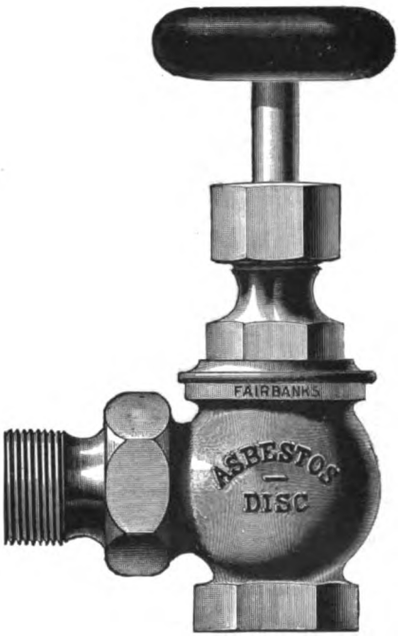


FIG. 12.

Fig. 11.

No. 1 ASBESTOS DISC RADIATOR VALVES, WOOD WHEEL.

SIZES.	¼ in.	⅜ in.	½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.
Rough Body, Finished Trimmings, . .	$1.50	1.65	2.00	2.50	3.20	4.50	6.25	10.50
Rough Body, Plated Trimmings, . .	1.75	1.90	2.25	2.70	3.50	4.75	6.50	10.75
Rough Body, Nickel Plated, . . .	2.00	2.15	2.50	2.85	3.65	4.90	6.75	11.00
Finished all over, ...	2.00	2.15	2.50	3.00	3.75	5.25	7.25	11.75
Finished all over and Nickel Plated, . .	2.35	2.50	2.85	3.10	4.00	5.40	7.75	12.25

Fig. 12.

No. 1 ASBESTOS DISC RADIATOR VALVES, WOOD WHEEL, MALE OR FEMALE UNION.

SIZES.	¼ in.	⅜ in.	½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.
Rough Body, Finished Trimmings, . .	$2.25	2.40	2.75	3.50	4.30	5.85	7.75	12.60
Rough Body, Plated Trimmings, . .	2.50	2.65	3.00	3.75	4.65	6.25	8.00	12.85
Rough Body, Nickel Plated, . . .	2.70	2.85	3.20	3.80	4.75	6.40	8.10	13.10
Finished all over, ...	2.70	2.85	3.20	4.00	4.80	6.40	8.75	13.85
Finished all over and Nickel Plated, . .	2.85	3.00	3.25	4.25	5.25	7.00	9.25	14.35

Right Hand Threads or Male Union furnished unless otherwise ordered.

VULCANIZED

ASBESTOS DISC RADIATOR VALVES.

FIG. 13.

FIG. 14.

Fig. 13.

No. 1 ASBESTOS DISC RADIATOR VALVES, TEE HANDLE.

SIZES.	¼ in.	⅜ in.	½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.
Rough Body, Finished Trimmings,	$1.50	1.65	2.00	2.50	3.20	4.50	6.25	10.50
Rough Body, Plated Trimmings,	1.75	1.90	2.25	2.70	3.50	4.75	6.50	10.75
Rough Body, Nickel Plated,	2.00	2.15	2.50	2.85	3.65	4.90	6.75	11.00
Finished all over,	2.00	2.15	2.50	3.00	3.75	5.25	7.25	11.75
Finished all over and Nickel Plated,	2.35	2.50	2.85	3.10	4.00	5.40	7.75	12.25

Fig. 14.

No. 1 ASBESTOS DISC RADIATOR VALVES, TEE HANDLE, MALE OR FEMALE UNION.

SIZES.	¼ in.	⅜ in.	½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.
Rough Body, Finished Trimmings,	$2.25	2.40	2.75	3.50	4.30	5.85	7.75	12.60
Rough Body, Plated Trimmings,	2.50	2.65	3.00	3.75	4.65	6.25	8.00	12.85
Rough Body, Nickel Plated,	2.70	2.85	3.20	3.80	4.75	6.40	8.10	13.10
Finished all over,	2.70	2.85	3.20	4.00	4.80	6.40	8.75	13.85
Finished all over and Nickel Plated,	2.85	3.00	3.25	4.25	5.25	7.00	9.25	14.35

Right Hand Threads or Male Union furnished unless otherwise ordered.

VULCANIZED

ASBESTOS DISC RADIATOR VALVES.

FIG. 15.

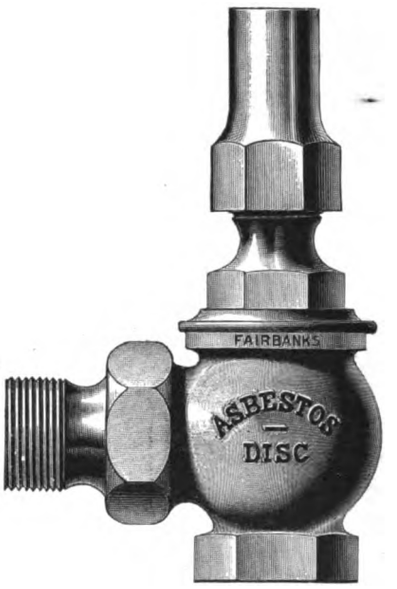


FIG. 16.

Fig. 15.

No. 1 ASBESTOS DISC RADIATOR VALVES, WITH LOCK SHIELD.

SIZES.	¼ in.	⅜ in.	½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.
Rough Body, Finished Trimmings,	$1.50	1.65	2.00	2.50	3.20	4.50	6.25	10.50
Rough Body, Plated Trimmings,	1.75	1.90	2.25	2.70	3.50	4.75	6.50	10.75
Rough Body, Nickel Plated,	2.00	2.15	2.50	2.85	3.65	4.90	6.75	11.00
Finished all over,	2.00	2.15	2.50	3.00	3.75	5.25	7.25	11.75
Finished all over and Nickel Plated,	2.35	2.50	2.85	3.10	4.00	5.40	7.75	12.25

Fig. 16.

No. 1 ASBESTOS DISC RADIATOR VALVES, WITH LOCK SHIELD, MALE OR FEMALE UNION.

SIZES.	¼ in.	⅜ in.	½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.
Rough Body, Finished Trimmings,	$2.25	2.40	2.75	3.50	4.30	5.85	7.75	12.60
Rough Body, Plated Trimmings,	2.50	2.65	3.00	3.75	4.65	6.25	8.00	12.85
Rough Body, Nickel Plated,	2.70	2.85	3.20	3.80	4.75	6.40	8.10	13.10
Finished all over,	2.70	2.85	3.20	4.00	4.80	6.40	8.75	13.85
Finished all over and Nickel Plated,	2.85	3.00	3.25	4.25	5.25	7.00	9.25	14.35

Right Hand Threads or Male Union furnished unless otherwise ordered.

VULCANIZED

ASBESTOS DISC RADIATOR VALVES.

FIG. 17.

FIG. 18.

Fig. 17.

No. 1 ASBESTOS DISC RADIATOR VALVES, WITH SQUARE FOR KEY.

SIZES.	¼ in.	⅜ in.	½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.
Rough Body, Finished Trimmings, . .	$1.50	1.65	2.00	2.50	3.20	4.50	6.25	10.50
Rough Body, Plated Trimmings, . .	1.75	1.90	2.25	2.70	3.50	4.75	6.50	10.75
Rough Body, Nickel Plated, . . .	2.00	2.15	2.50	2.85	3.65	4.90	6.75	11.00
Finished all over, ...	2.00	2.15	2.50	3.00	3.75	5.25	7.25	11.75
Finished all over and Nickel Plated, . .	2.35	2.50	2.85	3.10	4.00	5.40	7.75	12.25

Fig. 18.

No. 1 ASBESTOS DISC RADIATOR VALVES, WITH SQUARE FOR KEY, MALE OR FEMALE UNION.

SIZES.	¼ in.	⅜ in.	½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.
Rough Body, Finished Trimmings, . .	$2.25	2.40	2.75	3.50	4.30	5.85	7.75	12.60
Rough Body, Plated Trimmings, . .	2.50	2.65	3.00	3.75	4.65	6.25	8.00	12.85
Rough Body, Nickel Plated, . . .	2.70	2.85	3.20	3.80	4.75	6.40	8.10	13.10
Finished all over, ...	2.70	2.85	3.20	4.00	4.80	6.40	8.75	13.85
Finished all over and Nickel Plated, . .	2.85	3.00	3.25	4.25	5.25	7.00	9.25	14.35

Right Hand Threads or Male Union furnished unless otherwise ordered.
The above prices do not include keys, which will be found on page 23.

VULCANIZED

ASBESTOS DISC BRASS VALVES.

These Valves are especially made for Low Pressure. They take the same disc and have the same size opening as No. 1 Valves.

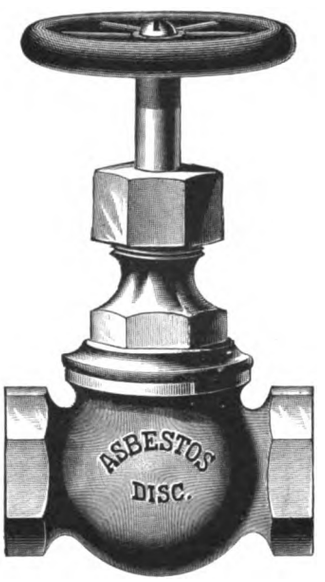


FIG. 19.

FIG. 20.

Fig. 19.

No. 2 ASBESTOS DISC BRASS GLOBE VALVES, ROUGH BODY, IRON WHEEL.

SIZES.	¼ in.	⅜ in.	½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.	2½ in.	3 in.	3½ in.	4 in.
Price, ...	$1.00	1.15	1.40	1.90	2.50	3.50	4.50	7.00	14.00	20.00	....	....

Fig. 20.

No. 2 ASBESTOS DISC BRASS ANGLE VALVES, ROUGH BODY, IRON WHEEL.

SIZES.	¼ in.	⅜ in.	½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.	2½ in.	3 in.	3½ in.	4 in.
Price, ...	$1.00	1.15	1.40	1.90	2.50	3.50	4.50	7.00	14.00	20.00	....	....

VULCANIZED

ASBESTOS DISC BRASS VALVES.

These Valves are especially made for Low Pressure. They take the same disc and have the same size opening as No. 1 Valves.

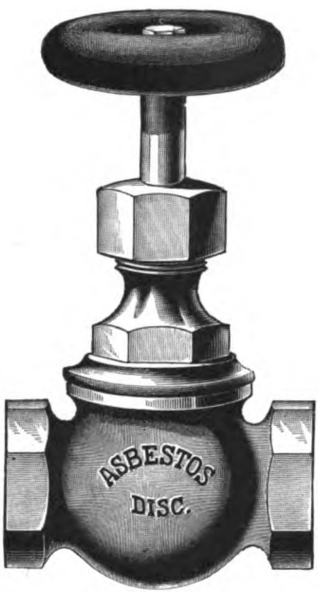


FIG. 21.

FIG. 22.

Fig. 21.

No. 2 ASBESTOS DISC BRASS GLOBE VALVES, WOOD WHEEL.

SIZES.	¼ in.	⅜ in.	½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.
Rough Body, Finished Trimmings, . .	$1.30	1.50	1.65	1.95	2.65	3.85	5.35	8.00
Rough Body, Plated Trimmings, . .	1.50	1.70	1.85	2.20	2.80	4.20	5.70	8.25
Rough Body, Nickel Plated, . . .	1.60	1.80	1.95	2.30	3.05	4.30	5.85	8.75
Finished all over, ...	1.80	2.00	2.15	2.50	3.25	4.60	6.35	9.50
Finished all over and Nickel Plated, . .	2.10	2.30	2.45	2.85	3.65	5.05	6.85	10.25

Fig. 22.

No. 2 ASBESTOS DISC BRASS ANGLE VALVES, WOOD WHEEL.

SIZES.	¼ in.	⅜ in.	½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.
Rough Body, Finished Trimmings, . .	$1.30	1.50	1.65	1.95	2.65	3.85	5.35	8.00
Rough Body, Plated Trimmings, . .	1.50	1.70	1.85	2.20	2.80	4.20	5.70	8.25
Rough Body, Nickel Plated, . . .	1.60	1.80	1.95	2.30	3.05	4.30	5.85	8.75
Finished all over, ...	1.80	2.00	2.15	2.50	3.25	4.60	6.35	9.50
Finished all over and Nickel Plated, . .	2.10	2.30	2.45	2.85	3.65	5.05	6.85	10.25

VULCANIZED

ASBESTOS DISC BRASS VALVES.

These Valves are especially made for Low Pressure. They take the same disc and have the same size opening as No. 1 Valves.

FIG. 23.

FIG. 24.

Fig. 23.

No. 2 ASBESTOS DISC BRASS GLOBE VALVES, FINISHED BODY, BRASS WHEEL.

SIZES.	¼ in.	⅜ in.	½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.
Rough Body, Finished Trimmings, . .	$1.30	1.50	1.65	1.95	2.65	3.85	5.35	8.00
Rough Body, Plated Trimmings, . .	1.50	1.70	1.85	2.20	2.80	4.20	5.70	8.25
Rough Body, Nickel Plated, . . .	1.60	1.80	1.95	2.30	3.05	4.30	5.85	8.75
Finished all over, ...	1.80	2.00	2.15	2.50	3.25	4.60	6.35	9.50
Finished all over and Nickel Plated, . .	2.10	2.30	2.45	2.85	3.65	5.05	6.85	10.25

Fig. 24.

No. 2 ASBESTOS DISC BRASS GLOBE VALVES, LOCK SHIELD.

SIZES.	¼ in.	⅜ in.	½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.
Rough Body, Finished Trimmings, . .	$1.30	1.50	1.65	1.95	2.65	3.85	5.35	8.00
Rough Body, Plated Trimmings, . .	1.50	1.70	1.85	2.20	2.80	4.20	5.70	8.25
Rough Body, Nickel Plated, . . .	1.60	1.80	1.95	2.30	3.05	4.30	5.85	8.75
Finished all over, ...	1.80	2.00	2.15	2.50	3.25	4.60	6.35	9.50
Finished all over and Nickel Plated, . .	2.10	2.30	2.45	2.85	3.65	5.05	6.85	10.25

VULCANIZED

ASBESTOS DISC BRASS VALVES.

These Valves are especially made for Low Pressure. They take the same disc and have the same size opening as No. 1 Valves.

FIG. 25.

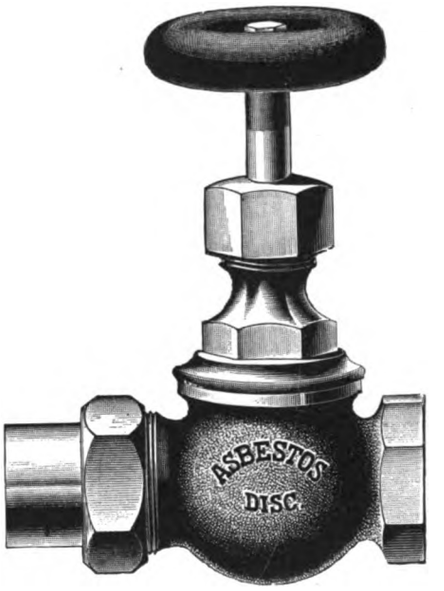


FIG. 26.

Fig. 25.

No. 2 ASBESTOS DISC BRASS GLOBE VALVES, WITH SQUARE FOR KEY.

SIZES.	¼ in.	⅜ in.	½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.
Rough Body, Finished Trimmings, . .	$1.30	1.50	1.65	1.95	2.65	3.85	5.35	8.00
Rough Body, Plated Trimmings, . .	1.50	1.70	1.85	2.20	2.80	4.20	5.70	8.25
Rough Body, Nickel Plated, . . .	1.60	1.80	1.95	2.30	3.05	4.30	5.85	8.75
Finished all over, ...	1.80	2.00	2.15	2.50	3.25	4.60	6.35	9.50
Finished all over and Nickel Plated, . .	2.10	2.30	2.45	2.85	3.65	5.05	6.85	10.25

Fig. 26.

No. 2 ASBESTOS DISC BRASS GLOBE VALVES, WOOD WHEEL, WITH UNION.

SIZES.	¼ in.	⅜ in.	½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.
Rough Body, Finished Trimmings, . .	$2.00	2.20	2.35	2.80	3.65	5.10	7.35	11.00
Rough Body, Plated Trimmings, . .	2.15	2.35	2.50	2.95	3.75	5.50	7.50	11.25
Rough Body, Nickel Plated, . . .	2.05	2.25	2.40	3.20	4.10	5.65	7.95	11.85
Finished all over, ...	2.50	2.70	2.85	3.35	4.25	5.85	8.35	12.50
Finished all over and Nickel Plated, . .	2.70	2.90	3.20	3.75	4.70	6.40	8.95	13.35

Male Union furnished unless otherwise ordered.

The above prices do not include keys, which will be found on page 23.

VULCANIZED

ASBESTOS DISC RADIATOR VALVES.

FIG. 27.

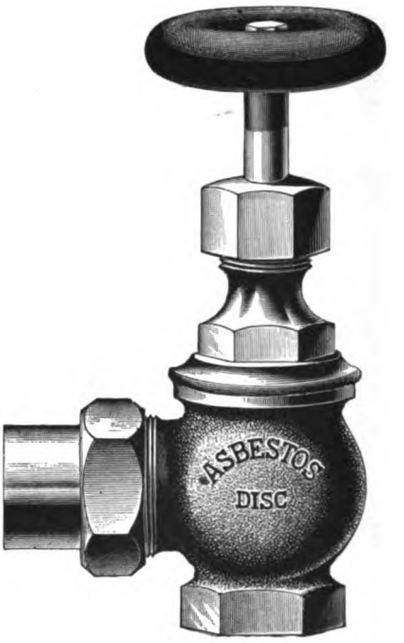


FIG. 28.

Fig. 27.

No. 2 ASBESTOS DISC RADIATOR VALVES, WOOD WHEEL.

SIZES.	¼ in.	⅜ in.	½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.
Rough Body, Finished Trimmings,	$1.30	1.50	1.65	1.95	2.65	3.85	5.35	8.00
Rough Body, Plated Trimmings,	1.50	1.70	1.85	2.20	2.80	4.20	5.70	8.25
Rough Body, Nickel Plated,	1.60	1.80	1.95	2.30	3.05	4.30	5.85	8.75
Finished all over,	1.80	2.00	2.15	2.50	3.25	4.60	6.35	9.50
Finished all over and Nickel Plated,	2.10	2.30	2.45	2.85	3.65	5.05	6.85	10.25

Fig. 28.

No. 2 ASBESTOS DISC RADIATOR VALVES, WOOD WHEEL, MALE OR FEMALE UNION.

SIZES.	¼ in.	⅜ in.	½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.
Rough Body, Finished Trimmings,	$2.00	2.20	2.35	2.80	3.65	5.10	7.35	11.00
Rough Body, Plated Trimmings,	2.15	2.35	2.50	2.95	3.75	5.50	7.50	11.25
Rough Body, Nickel Plated,	2.05	2.25	2.40	3.20	4.10	5.65	7.95	11.85
Finished all over,	2.50	2.70	2.85	3.35	4.25	5.85	8.35	12.50
Finished all over and Nickel Plated,	2.70	2.90	3.20	3.75	4.70	6.40	8.95	13.35

Right Hand Threads or Male Union furnished unless otherwise ordered.

VULCANIZED

ASBESTOS DISC RADIATOR VALVES.

FIG. 29.

FIG. 30.

Fig. 29.

No. 2 ASBESTOS DISC RADIATOR VALVES, TEE HANDLE.

SIZES.	¼ in.	⅜ in.	½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.
Rough Body, Finished Trimmings,	$1.30	1.50	1.65	1.95	2.65	3.85	5.35	8.00
Rough Body, Plated Trimmings,	1.50	1.70	1.85	2.20	2.80	4.20	5.70	8.25
Rough Body, Nickel Plated,	1.60	1.80	1.95	2.30	3.05	4.30	5.85	8.75
Finished all over,	1.80	2.00	2.15	2.50	3.25	4.60	6.35	9.50
Finished all over and Nickel Plated,	2.10	2.30	2.45	2.85	3.65	5.05	6.85	10.25

Fig. 30.

No. 2 ASBESTOS DISC RADIATOR VALVES, TEE HANDLE, MALE OR FEMALE UNION.

SIZES.	¼ in.	⅜ in.	½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.
Rough Body, Finished Trimmings,	$2.00	2.20	2.35	2.80	3.65	5.10	7.35	11.00
Rough Body, Plated Trimmings,	2.15	2.35	2.50	2.95	3.75	5.50	7.50	11.25
Rough Body, Nickel Plated,	2.05	2.25	2.40	3.20	4.10	5.65	7.95	11.85
Finished all over,	2.50	2.70	2.85	3.35	4.25	5.85	8.35	12.50
Finished all over and Nickel Plated,	2.70	2.90	3.20	3.75	4.70	6.40	8.95	13.35

Right Hand Threads or Male Union furnished unless otherwise ordered.

VULCANIZED

ASBESTOS DISC RADIATOR VALVES.

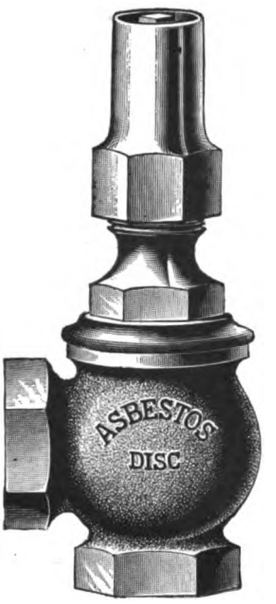


FIG. 31.

FIG. 32.

Fig. 31.

No. 2 ASBESTOS DISC RADIATOR VALVES, WITH LOCK SHIELD.

SIZES.	¼ in.	⅜ in.	½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.
Rough Body, Finished Trimmings, . .	$1.30	1.50	1.65	1.95	2.65	3.85	5.35	8.00
Rough Body, Plated Trimmings, . .	1.50	1.70	1.85	2.20	2.80	4.20	5.70	8.25
Rough Body, Nickel Plated, . . .	1.60	1.80	1.95	2.30	3.05	4.30	5.85	8.75
Finished all over, ...	1.80	2.00	2.15	2.50	3.25	4.60	6.35	9.50
Finished all over and Nickel Plated, . .	2.10	2.30	2.45	2.85	3.65	5.05	6.85	10.25

Fig. 32.

No. 2 ASBESTOS DISC RADIATOR VALVES, WITH LOCK SHIELD, MALE OR FEMALE UNION.

SIZES.	¼ in.	⅜ in.	½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.
Rough Body, Finished Trimmings, . .	$2.00	2.20	2.35	2.80	3.65	5.10	7.35	11.00
Rough Body, Plated Trimmings, . .	2.15	2.35	2.50	2.95	3.75	5.50	7.50	11.25
Rough Body, Nickel Plated, . . .	2.05	2.25	2.40	3.20	4.10	5.65	7.95	11.85
Finished all over, ...	2.50	2.70	2.85	3.35	4.25	5.85	8.35	12.50
Finished all over and Nickel Plated, . .	2.70	2.90	3.20	3.75	4.70	6.40	8.95	13.35

Right Hand Threads or Male Union furnished unless otherwise ordered.

VULCANIZED

ASBESTOS DISC RADIATOR VALVES.

FIG. 33.

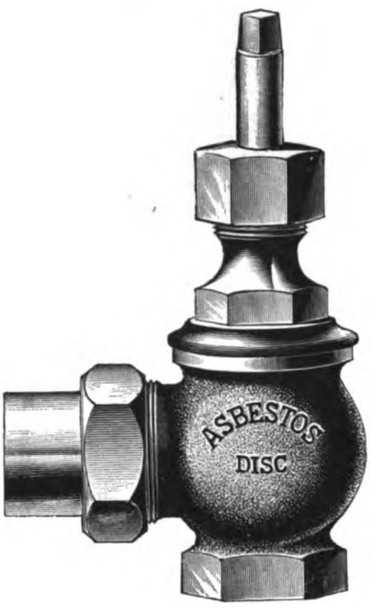


FIG. 34.

Fig. 33.

No. 2 ASBESTOS DISC RADIATOR VALVES, WITH SQUARE FOR KEY.

SIZES.	¼ in.	⅜ in.	½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.
Rough Body, Finished Trimmings,	$1.30	1.50	1.65	1.95	2.65	3.85	5.35	8.00
Rough Body, Plated Trimmings,	1.50	1.70	1.85	2.20	2.80	4.20	5.70	8.25
Rough Body, Nickel Plated,	1.60	1.80	1.95	2.30	3.05	4.30	5.85	8.75
Finished all over,	1.80	2.00	2.15	2.50	3.25	4.60	6.35	9.50
Finished all over and Nickel Plated,	2.10	2.30	2.45	2.85	3.65	5.05	6.85	10.25

Fig. 34.

No. 2 ASBESTOS DISC RADIATOR VALVES, WITH SQUARE FOR KEY, MALE OR FEMALE UNION.

SIZES.	¼ in.	⅜ in.	½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.
Rough Body, Finished Trimmings,	$2.00	2.20	2.35	2.80	3.65	5.10	7.35	11.00
Rough Body, Plated Trimmings,	2.15	2.35	2.50	2.95	3.75	5.50	7.50	11.25
Rough Body, Nickel Plated,	2.05	2.25	2.40	3.20	4.10	5.65	7.95	11.85
Finished all over,	2.50	2.70	2.85	3.35	4.25	5.85	8.35	12.50
Finished all over and Nickel Plated,	2.70	2.90	3.20	3.75	4.70	6.40	8.95	13.35

Right Hand Threads or Male Union furnished unless otherwise ordered.
The above prices do not include keys, which will be found on page 23.

VULCANIZED

ASBESTOS DISC BRASS VALVES.

FIG. 35.

FIG. 36.

Fig. 35.

ASBESTOS DISC BRASS LOW PRESSURE SAFETY VALVES.

SIZES.	½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.	2½ in.	3 in.
Price,	$2.50	3.50	4.00	5.00	6.00	7.50	....	....

Fig. 36.

ASBESTOS DISC BRASS CROSS VALVES, IRON WHEEL.

SIZES.	½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.	2½ in.	3 in.
Screwed,	$2.25	2.50	3.25	4.75	6.25	9.50	20.00	30.00
Flanged,	....	....	....	....	15.25	23.00	32.00	47.00
Diameter of Flanges,	....	....	....	....	5 in.	6 in.	6½ in.	7½ in.

VULCANIZED

ASBESTOS DISC BRASS VALVES.

FIG. 37.

FIG. 38.

Fig. 37. ASBESTOS DISC BRASS HOSE VALVES, SCREWED.

SIZES.	1½ in.	2 in.	2½ in.
Price, ...	$8.00	15.75	22.00

Fig. 37. ASBESTOS DISC BRASS HOSE VALVES, FLANGED.

SIZES.	1½ in.	2 in.	2½ in.
Price, ...	$11.00	16.50	25.00
Diameter of Flanges, ...	5 in.	6 in.	6½ in.

Fig. 38. ASBESTOS DISC BRASS ANGLE HOSE VALVES, SCREWED.

SIZES.	1½ in.	2 in.	2½ in.
Price, ...	$8.00	15.75	22.00

Fig. 38. ASBESTOS DISC BRASS ANGLE HOSE VALVES, FLANGED.

SIZES.	1½ in.	2 in.	2½ in.
Price, ...	$11.00	16.50	25.00
Diameter of Flanges, ...	5 in.	6 in.	6½ in.

VULCANIZED

ASBESTOS DISC BRASS VALVES.

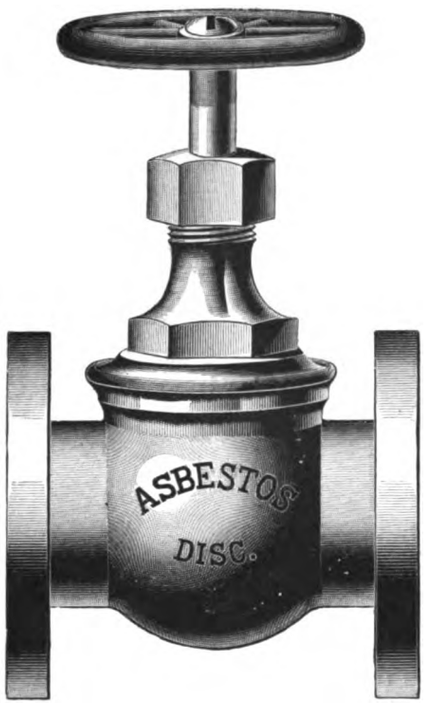


FIG. 39.

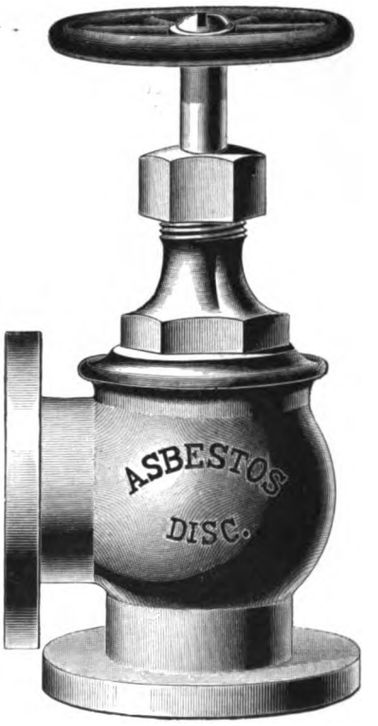


FIG. 40.

Fig. 39.

ASBESTOS DISC BRASS GLOBE VALVES, FLANGED.

SIZES.	1 in.	1¼ in.	1½ in.	2 in.	2½ in.	3 in.
Price,	$6.00	9.00	11.00	16.50	25.00	34.00
Diameter of Flanges,	4 in.	4½ in.	5 in.	6 in.	6½ in.	7½ in.

Fig. 40.

ASBESTOS DISC BRASS ANGLE VALVES, FLANGED.

SIZES.	1 in.	1¼ in.	1½ in.	2 in.	2½ in.	3 in.
Price,	$6.00	9.00	11.00	16.50	25.00	34.00
Diameter of Flanges,	4 in.	4½ in.	5 in.	6 in.	6½ in.	7½ in.

VULCANIZED
ASBESTOS DISC BRASS VALVES.

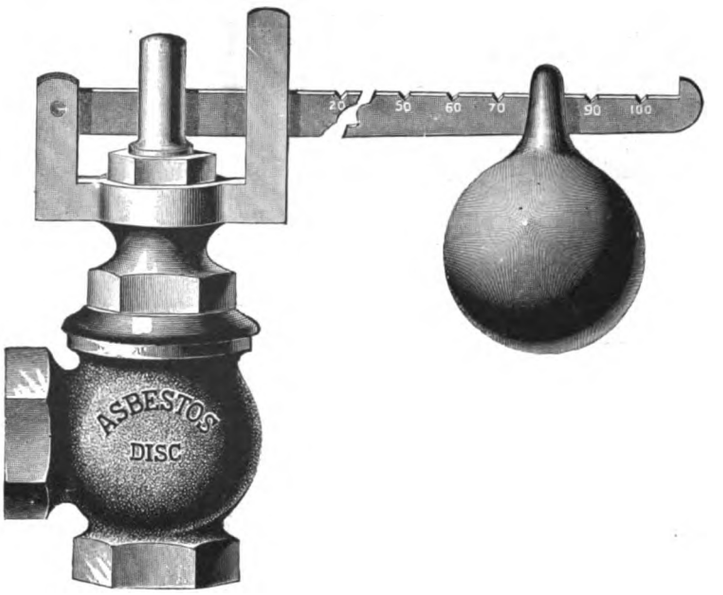


Fig. 41.

ASBESTOS DISC BRASS ANGLE SAFETY VALVES.

Sizes.	½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.
Price, ...	$3.75	4.50	5.00	7.50	9.25	14.00

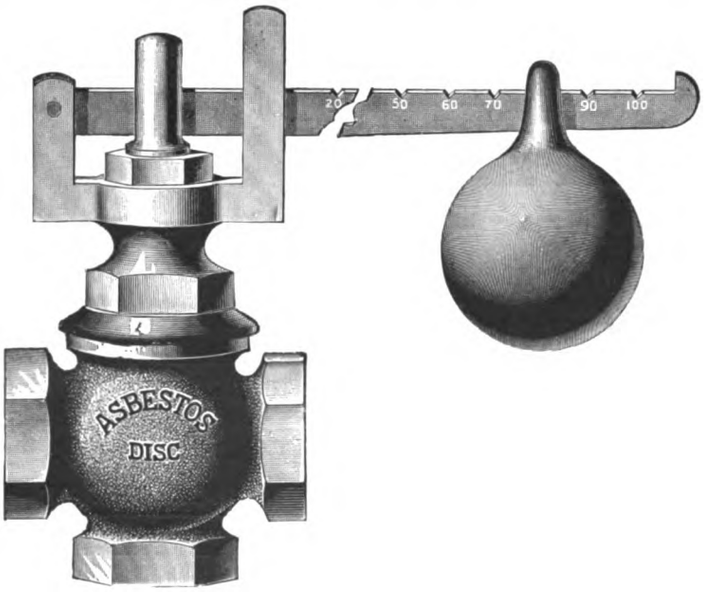
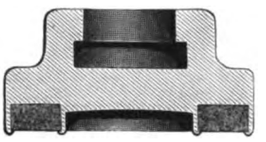


Fig. 42.

ASBESTOS DISC BRASS CROSS SAFETY VALVES.

Sizes.	½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.
Price, ...	$3.75	4.50	5.00	7.50	9.25	14.00

VULCANIZED ASBESTOS DISCS.



Sectional View Showing Asbestos Disc in Holder.
FIG. 43.

GLOBE DISCS,

Furnished Complete with Holder,

For Br. and I. B. Globe and Angle Valves,

Vulcanized Asbestos.

Fig. 44.

Asbestos Disc and Holder Complete.
FIG. 44.

ASBESTOS DISCS FOR BRASS GLOBE AND ANGLE VALVES.

SIZES.	¼ in.	⅜ in.	½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.	2½ in.	3 in.
Disc and Holder Complete, . . .	$0.06	.07	.09	.10	.12	.18	.25	.36	.48	.60

ASBESTOS DISCS FOR IRON BODY GLOBE AND ANGLE VALVES.

SIZES.	1½ in.	2 in.	2½ in.	3 in.	3½ in.	4 in.	5 in.	6 in.	7 in.	8 in.	10 in.	12 in.
Disc and Holder Complete,	$0.25	.36	.48	.60	.75	.90	1.20	1.50	1.80	2.10	2.70	3.00

FIG. 45.

CHECK DISCS,

For Brass and Iron Body Check Valves,
Brass, Leather or Asbestos.

Figs. 45 and 46.

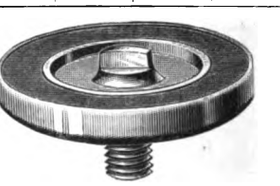


FIG. 46.

DISCS FOR BRASS CHECK VALVES.

SIZES.	¼ in.	⅜ in.	½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.	2½ in.	3 in.
Brass, ...	$0.12	.14	.18	.20	.24	.36	.50	.75	1.00	1.25
Asbestos or Leather, . . .	.12	.14	.18	.20	.24	.36	.50	.75	1.00	1.25

DISCS FOR IRON BODY CHECK VALVES.

SIZES.	2 in.	2½ in.	3 in.	3½ in.	4 in.	5 in.	6 in.	7 in.	8 in.	10 in.	12 in.	14 in.	16 in.
Brass, ...	$0.75	1.00	1.25	1.50	1.80	2.50	3.00	3.60	4.20	5.40	6.00	....	....
Asbestos or Leather,	.75	1.00	1.25	1.50	1.80	2.50	3.00	3.60	4.20	5.40	6.00	....	....

FIG. 47.

STOP DISCS,

For Brass and Iron Body Stop Valves,
Brass, Leather or Asbestos.

Figs. 47 and 48.

FIG. 48.

DISCS FOR BRASS STOP, LOCK CHECK AND BACK PRESSURE VALVES.

SIZES.	⅜ in.	½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.	2½ in.	3 in.
Brass, ...	$0.14	.18	.20	.24	.36	.50	.75	1.00	1.25
Asbestos or Leather, ...	.14	.18	.20	.24	.36	.50	.75	1.00	1.25

DISCS FOR IRON BODY STOP, LOCK CHECK AND BACK PRESSURE VALVES.

SIZES.	2 in.	2½ in.	3 in.	3½ in.	4 in.	5 in.	6 in.	7 in.	8 in.	10 in.	12 in.	14 in.	16 in.
Brass, ...	$0.75	1.00	1.25	1.50	1.80	2.50	3.00	3.60	4.20	5.40	6.00	....	....
Asbestos or Leather,	.75	1.00	1.25	1.50	1.80	2.50	3.00	3.60	4.20	5.40	6.00	....	....

WHEELS AND HANDLES,

FOR VULCANIZED ASBESTOS DISC, BRASS GLOBE, RADIATOR AND ANGLE VALVES.

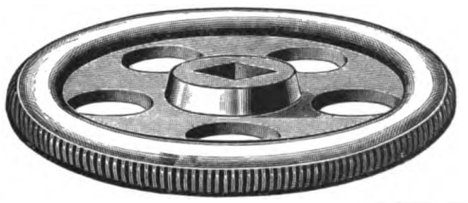


FIG. 49.

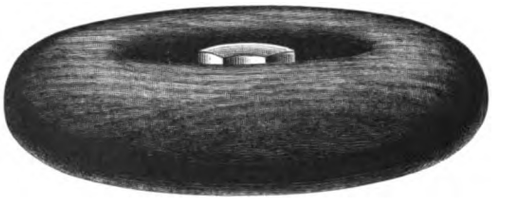


FIG. 50.

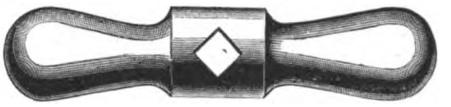


FIG. 51.

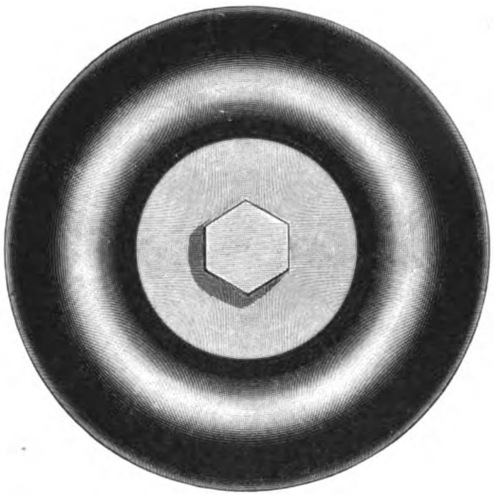


FIG. 52.

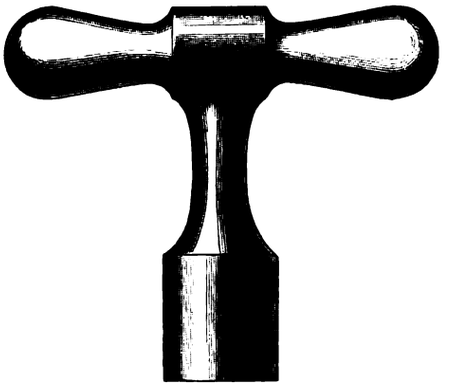


FIG. 53.

Fig. 49. FINISHED BRASS WHEELS.

SIZES.	¼ in.	⅜ in.	½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.
Brass,	$0.75	.75	.85	1.00	1.00	1.25	1.60	1.80
Nickel Plated,	.85	.85	.95	1.10	1.10	1.35	1.70	1.90

Fig. 53. FINISHED BRASS RADIATOR VALVE KEYS.

SIZES.	¼ in.	⅜ in.	½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.
Brass,	$0.50	.50	.75	.75	.75	1.00	1.00	1.25
Nickel Plated,	.60	.60	.80	.80	.80	1.10	1.10	1.35

Fig. 51. FINISHED BRASS TEE HANDLES.

SIZES.	¼ in.	⅜ in.	½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.
Brass,	$0.40	.40	.65	.65	.65	.75	.80	1.00
Nickel Plated,	.50	.50	.75	.75	.75	.85	.90	1.10

Fig. 50. ROSE WOOD WHEELS.

SIZES.	¼ in.	⅜ in.	½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.
Wood Wheel,	$0.20	.20	.20	.25	.30	.35	.40	.50
With Brass Top and Bottom Plates,	.50	.50	.50	.60	.65	.70	.80	1.00
With Nickel Plated Top and Bottom Plates,	.60	.60	.60	.70	.75	.80	.90	1.10

Fig. 52. BLACK WOOD WHEELS.

SIZES.	¼ in.	⅜ in	½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.
Wood Wheel,	.15	.15	.15	.20	.20	.25	.25	.30
With Brass Top and Bottom Plates,	.40	.40	.40	.50	.50	.60	.60	.70
With Nickel Plated Top and Bottom Plates,	.50	.50	.50	.60	.60	.70	.70	.80

THE DUPLEX GAUGE COCK.

FIG. 54.

TWO GAUGE COCKS IN ONE.

This simple yet very effective Gauge Cock of the well-known ball lever principle is one which will commend itself to all steam users. As will be seen in the cut, there are two slots parallel to each other, in which are inserted narrow slips of vulcanized asbestos, which can be changed in a minute. When one becomes worn the ball is lifted and moved along on the bar until it covers the slip in the other seat—this can be done under full boiler pressure, with no danger whatsoever. The packing used in this Gauge Cock is made by the same process as that now in use in the asbestos disc valves and asbestos packed cocks, where it has stood many severe trials and tests. Having an extra seat, which is always ready for use, it is in reality two Gauge Cocks in one, which can be very easily kept in order and cleaned.

No. 1. DUPLEX GAUGE COCK.

SIZES.	⅜ in.	½ in.	¾ in.
Finished Brass, ...	$14.00 per dozen.	14.00 per dozen.	14.00 per dozen.

No. 2. DUPLEX GAUGE COCK.

SIZES.	⅜ in.	½ in.	¾ in.
Rough Brass, ...	$13.00 per dozen.	13.00 per dozen.	13.00 per dozen.

ASBESTOS PACKED GAUGE COCKS.

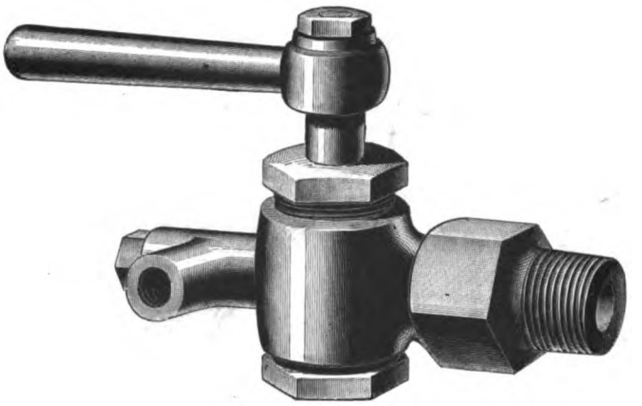


FIG. 55.

ASBESTOS PACKED BRASS GAUGE COCKS, LEVER HANDLE.

SIZES.	½ in.	¾ in.
Price,	$4.50	4.50

ASBESTOS DISC GAUGE COCKS.

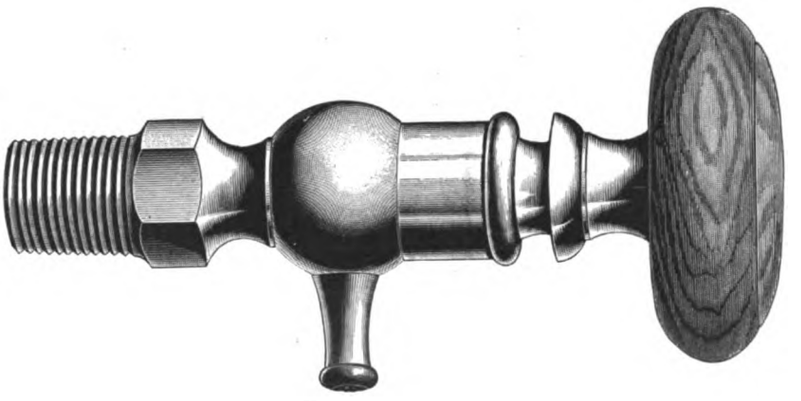


FIG. 56.

ASBESTOS DISC BRASS GAUGE COCKS, WOOD HANDLE.

SIZES.	⅜ in.	½ in.	¾ in.
Price,	$21.00 per dozen.	24.00 per dozen.	27.00 per dozen.
Disc and Holder, complete,	.07 each.	.09 each.	.10 each.

BRASS

STRAIGHTWAY SWINGING CHECK VALVES,

PATENT ROTATING DISC.

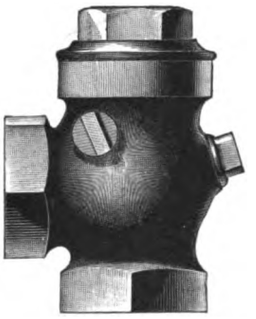


FIG. 57.

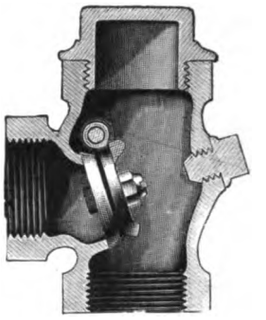


FIG. 58 (Sectional).

Figs. 57 and 58.

ANGLE SWINGING CHECK VALVES, BRASS DISC.

SIZES.	¼ in.	⅜ in.	1 in.	1¼ in.	1½ in.	2 in.	2½ in.	3 in.
Price, ...	$1.30	1.75	2.25	3.25	4.25	6.25	....	....

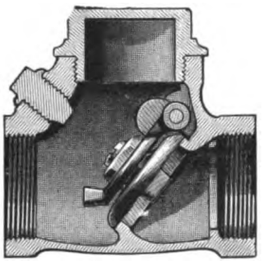


FIG. 59 (Sectional).

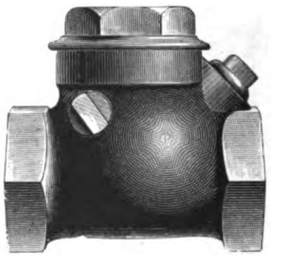


FIG. 60 (Horizontal or Vertical).

Figs. 59 and 60.

STRAIGHTWAY SWINGING CHECK VALVES, BRASS DISC.

SIZES.	¼ in.	⅜ in.	½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.	2½ in.	3 in.
Price, ...	$1.25	1.25	1.30	1.75	2.25	3.25	4.25	6.25	11.50	16.00

STRAIGHTWAY SWINGING CHECK VALVES, ASBESTOS OR LEATHER DISC.

SIZES.	½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.	2½ in.	3 in.
Price, ...	$1.30	1.75	2.25	3.25	4.25	6.25	11.50	16.00

BRASS

STRAIGHTWAY SWINGING CHECK VALVES,

ROTATING DISC.

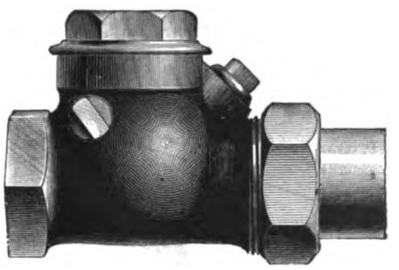


Fig. 61.

BRASS OR ASBESTOS DISCS.

Brass Straightway Swinging Check Valves, with Union.

Sizes.	1 in.	1¼ in.	1½ in.	2 in.
Price, . . .	$5.75	8.25	10.50	16.50

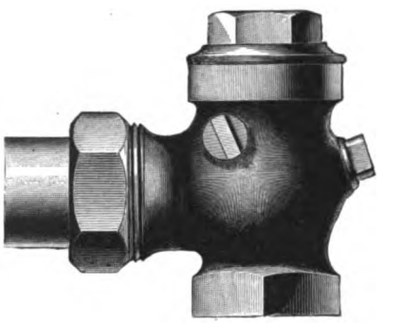


Fig. 62.

BRASS DISC.

Brass Angle Swinging Check Valves, with Union.

Sizes.	1 in.	1¼ in.	1½ in.	2 in.
Price, . . .	$5.75	8.25	10.50	15.50

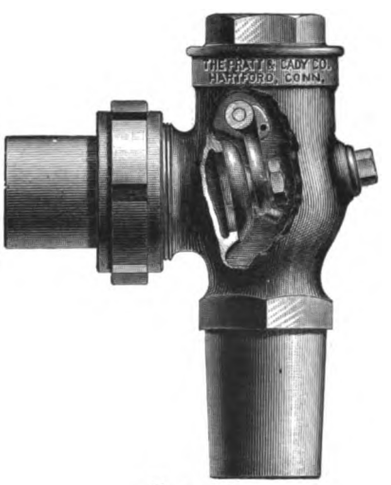


Fig. 63.

BRASS DISC.

Brass Locomotive Swinging Check Valves, with Union.

Size.	1¼ in.
Price, ...	$11.00

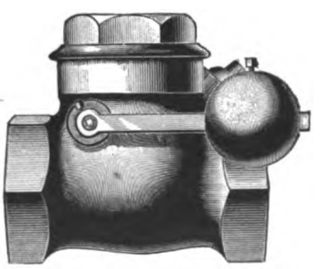


Fig. 64.

BRASS, LEATHER OR ASBESTOS DISCS.

Brass Straightway Rotating Disc, Back Pressure Valves.

Sizes.	1½ in.	2 in.	2½ in.	3 in.
Price, . . .	$4.25	6.25	11.50	16.00

BRASS

STRAIGHTWAY SWINGING STOP VALVES.

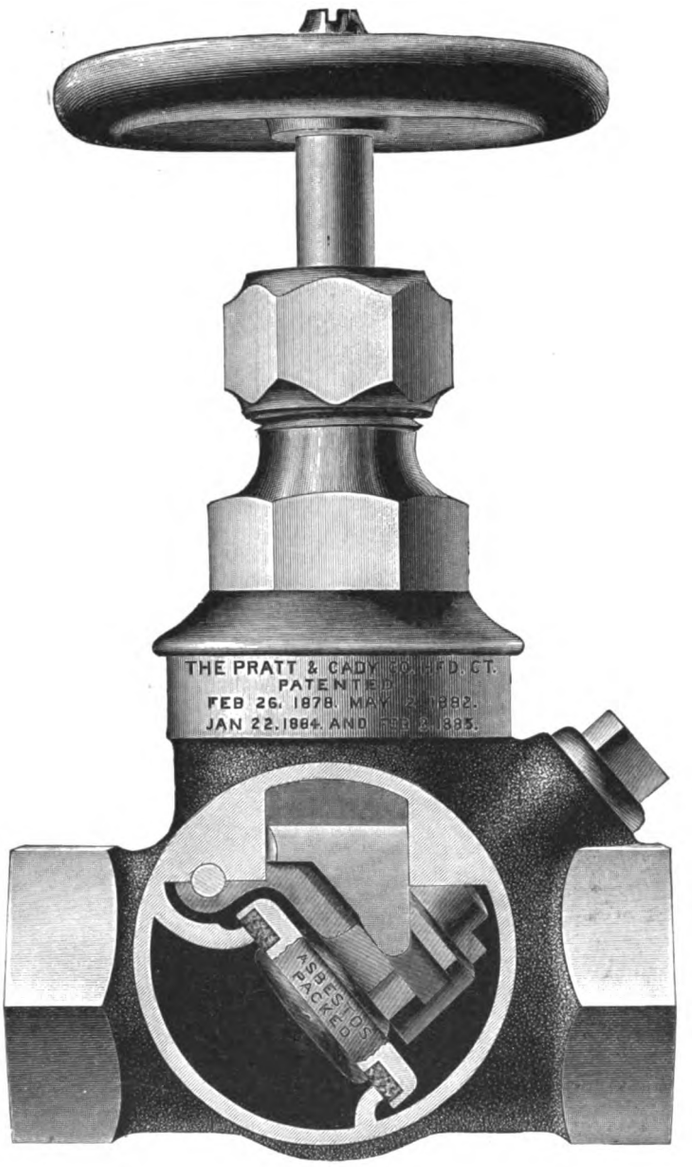


FIG. 65.

This valve is closed by the direct pressure of the spindle on the arm carrying the disc which swings on a hinge secured through the valve. It has a raised round seat, less likely to hold dirt, grit, scale or sediment, as in the case of broad flat seats. When the valve is open wide it has a full, free passage equal to the pipe area, and as the disc hangs at an angle of 45° it overcomes the friction due to wedging. This valve can be furnished with Brass or Asbestos Discs.

BRASS STRAIGHTWAY SWINGING STOP VALVES.

SIZES.	⅜ in.	½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.	2½ in.	3 in.
Brass Disc, ...	$1.25	1.30	1.75	2.25	3.25	4.25	6.25	11.50	16.00
Asbestos Disc, . . .	1.25	1.30	1.75	2.25	3.25	4.25	6.25	11.50	16.00

STRAIGHTWAY STOP VALVES,

BRASS AND IRON BODY.

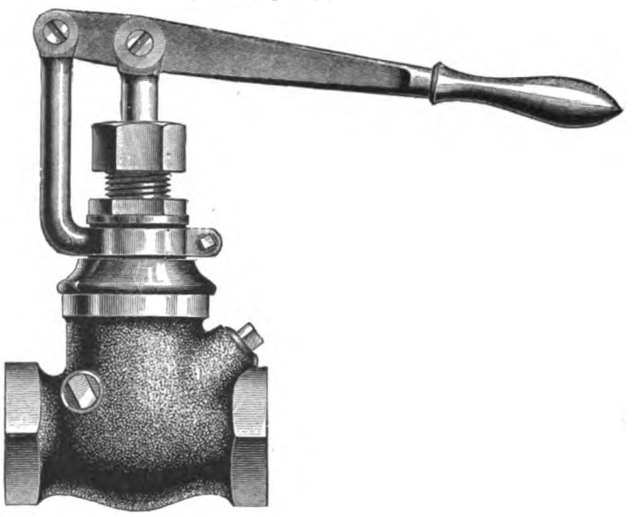


FIG. 66.

QUICK OPENING LEVER, STRAIGHTWAY STOP VALVES.

SIZES.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.	2½ in.	3 in.	3½ in.	4 in.	5 in.	6 in.
Brass,	$2.95	3.65	4.85	6.05	8.25	13.75	18.50	.....	.....	....	....
Iron Body, Screwed,	....	....	....	....	....	14.25	17.00	20.75	24.00	....	....
Iron Body, Flanged,	....	....	....	....	....	14.25	17.00	20.75	24.00	....	....
Diameter of Flanges,	....	....	....	....	....	7 in.	7 in.	8½ in.	9 in.	10 in.	11 in.

BRASS STRAIGHTWAY LOCK CHECK VALVES.

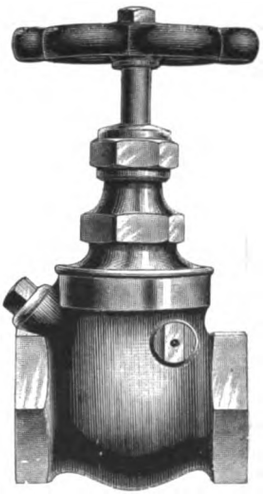


FIG. 67.

FIG. 68.

Fig. 67. STRAIGHTWAY LOCK CHECK VALVES.

SIZES.	⅜ in.	½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.	2½ in.	3 in.
Price,	$1.25	1.30	1.75	2.25	3.25	4.25	6.25	11.50	16.00

Fig. 68. ANGLE LOCK CHECK VALVES.

SIZES.	⅜ in.	½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.
Price,	$1.25	1.30	1.75	2.25	3.25	4.25	6.25

VULCANIZED

ASBESTOS DISC IRON BODY VALVES,

BRASS HUB, SCREWED AND FLANGED.

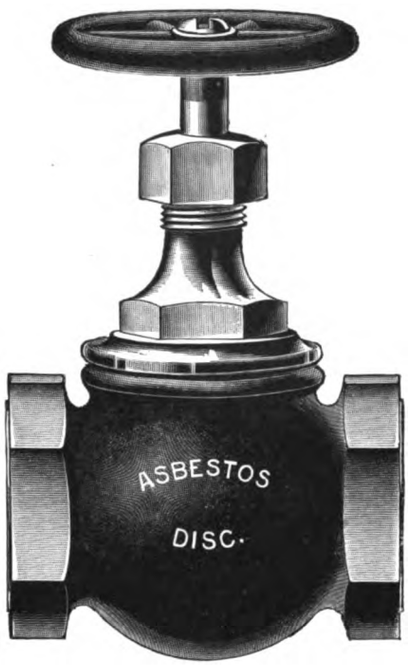


FIG. 69.

FIG. 70.

Fig. 69.

ASBESTOS DISC IRON BODY GLOBE VALVES, BRASS HUB, SCREWED.

SIZES.	1¼ in.	1½ in.	2 in.	2½ in.	3 in.	3½ in.	4 in.
Price,	$3.85	5.00	7.25	11.00	16.00	18.50	23.00
Distance End to End,	.....	....	6 in.	7⅛ in.	8⅛ in.	9⅛ in.	10⅜ in.

Fig. 70.

ASBESTOS DISC IRON BODY GLOBE VALVES, BRASS HUB, FLANGED.

SIZES.	1½ in.	2 in.	2½ in.	3 in.	3½ in.	4 in.
Price,	$6.00	8.50	13.00	18.00	20.50	25.00
Distance Face to Face,	.....	6½ in.	8 in.	8½ in.	10⅛ in.	10¾ in.
Diameter of Flanges,	5½ in.	6½ in.	7 in.	8 in.	9 in.	10 in.

VULCANIZED

ASBESTOS DISC IRON BODY VALVES,

BRASS HUB, SCREWED AND FLANGED.

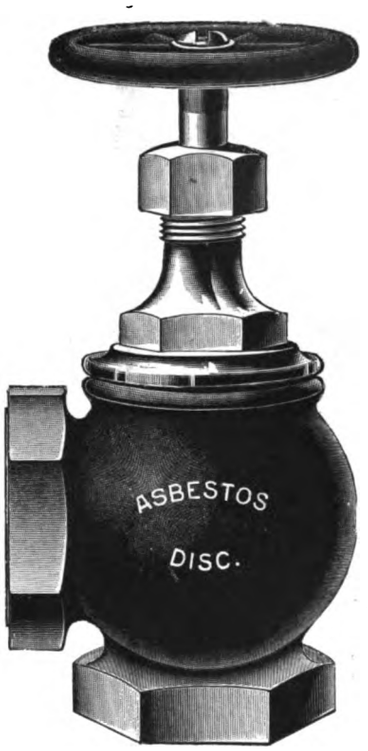


FIG. 71.

FIG. 72.

Fig. 71.

ASBESTOS DISC IRON BODY ANGLE VALVES, BRASS HUB, SCREWED.

SIZES.	1¼ in.	1½ in.	2 in.	2½ in.	3 in.	3½ in.	4 in.
Price,	$3.85	5.00	7.25	11.00	16.00	18.50	23.00
Distance from Centre to Inlet or Outlet,	3 in.	4¼ in.	4⅛ in.	4½ in.	5¼ in.	5⅞ in.	7 in.

Fig. 72.

ASBESTOS DISC IRON BODY ANGLE VALVES, BRASS HUB, FLANGED.

SIZES.	1½ in.	2 in.	2½ in.	3 in.	3½ in.	4 in.
Price,	$6.00	8.50	13.00	18.00	20.50	25.00
Distance from Centre to Inlet or Outlet,	.....	4⅛ in.	4⅝ in.	4¼ in.	5 1/16 in.	5½ in.
Diameter of Flanges,	5½ in.	6½ in.	7 in.	8 in.	9 in.	10 in.

VULCANIZED

ASBESTOS DISC IRON BODY VALVES,

IRON YOKE, SCREWED AND FLANGED.

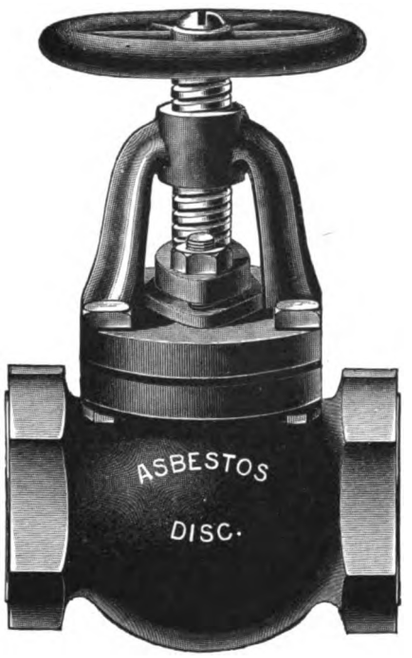


FIG. 73.

FIG. 74.

Fig. 73.

ASBESTOS DISC IRON BODY GLOBE VALVES, WITH YOKE, SCREWED.

SIZES.	2 in.	2½ in.	3 in.	3½ in.	4 in.	5 in.	6 in.	7 in.	8 in.	10 in.	12 in.
Price, . . .	$10.00	12.00	16.75	19.50	24.00	40.00	48.00	80.00	90.00	130.00	185.00
Distance End to End,	6 in.	7⅛ in.	8⅛ in.	9⅛ in.	10⅜ in.	11¼ in.	13¾ in.	14½ in.	16¼ in.	20 in.	23¾ in.

Fig. 74.

ASBESTOS DISC IRON BODY GLOBE VALVES, WITH YOKE, FLANGED.

SIZES.	2 in.	2½ in.	3 in.	3½ in.	4 in.	5 in.	6 in.	7 in.	8 in.	10 in.	12 in.
Price, . . .	$11.75	14.00	18.50	21.50	26.00	40.00	50.00	80.00	90.00	130.00	185.00
Distance Face to Face,	6½ in.	8 in.	8½ in.	10⅛ in.	10¾ in.	12 in.	15½ in.	15⅝ in.	17 in.	20 in.	23¾ in.
Diameter of Flanges,	6½ in.	7 in.	8 in.	9 in.	10 in.	11 in.	12 in.	13 in.	14 in.	16 in.	19 in.

VULCANIZED

ASBESTOS DISC IRON BODY VALVES,

IRON YOKE, SCREWED AND FLANGED.

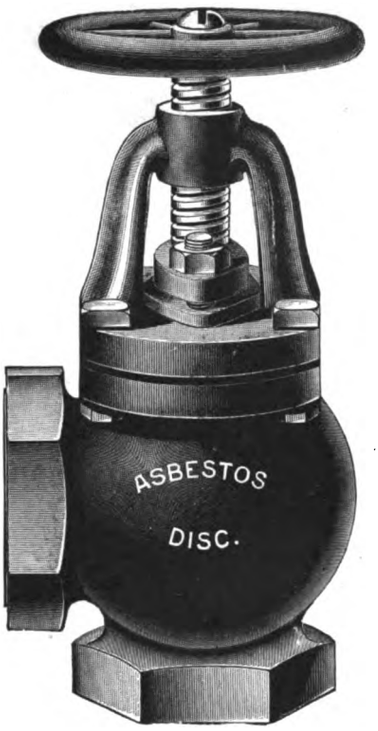


FIG. 75.

FIG. 76.

Fig. 75.

ASBESTOS DISC IRON BODY ANGLE VALVES, WITH YOKE, SCREWED.

SIZES.	2 in.	2½ in.	3 in.	3½ in.	4 in.	5 in.	6 in.	7 in.	8 in.	10 in.	12 in.
Price, . . .	$10.00	12.00	16.75	19.50	24.00	40.00	48.00	80.00	90.00	130.00	185.00
Distance from Centre to Inlet or Outlet,	3 in.	4¼ in.	4⅛ in.	4½ in.	5¼ in.	5⅞ in.	7 in.	7¼ in.	8⅛ in.	10 in.	11⅞ in.

Fig. 76.

ASBESTOS DISC IRON BODY ANGLE VALVES, WITH YOKE, FLANGED.

SIZES.	2 in.	2½ in.	3 in.	3½ in.	4 in.	5 in.	6 in.	7 in.	8 in.	10 in.	12 in.
Price, . . .	$11.75	14.00	18.50	21.50	26.00	42.00	50.00	80.00	90.00	130.00	185.00
Distance from Centre to Inlet or Outlet,	4⅛ in.	4⅝ in.	4¼ in.	5 1/16 in.	5½ in.	6¼ in.	7⅜ in.	7⅞ in.	8½ in.	10 in.	11⅞ in.
Diameter of Flanges,	6½ in.	7 in.	8 in.	9 in.	10 in.	11 in.	12 in.	13 in.	14 in.	16 in.	19 in.

VULCANIZED

ASBESTOS DISC IRON BODY VALVES,

BRASS HUB, SCREWED AND FLANGED.

FIG. 77.

FIG. 78.

Fig. 77.

ASBESTOS DISC IRON BODY CROSS VALVES, BRASS HUB, SCREWED.

SIZES.	1½ in.	2 in.	2½ in.	3 in.
Price,	$12.00	14.00	16.00	21.00
Distance End to End,	.....	6 in.	8½ in.	8½ in.

Fig. 78.

ASBESTOS DISC IRON BODY CROSS VALVES, BRASS HUB, FLANGED.

SIZES.	1½ in.	2 in.	2½ in.	3 in.
Price,	$15.00	17.00	19.00	24.00
Distance Face to Face,	.....	8¼ in.	9¼ in.	8½ in.
Diameter of Flanges,	.....	6½ in.	7 in.	8 in.

VULCANIZED

ASBESTOS DISC IRON BODY VALVES,

IRON YOKE, SCREWED AND FLANGED.

FIG. 79.

FIG. 80.

Fig. 79.

ASBESTOS DISC IRON BODY CROSS VALVES, WITH YOKE, SCREWED.

SIZES.	2 in.	2½ in.	3 in.	3½ in.	4 in.	5 in.	6 in.	8 in.	10 in.	12 in.
Price,	$14.00	16.00	21.00	26.00	30.00	45.00	58.00	.....	.....	.....
Distance End to End,	6 in.	8½ in.	8¼ in.	9 in.	10½ in.	11⅞ in.	14 in.	16¼ in.	20 in.	23¾ in.

Fig. 80.

ASBESTOS DISC IRON BODY CROSS VALVES, WITH YOKE, FLANGED.

SIZES.	2 in.	2½ in.	3 in.	3½ in.	4 in.	5 in.	6 in.	8 in.	10 in.	12 in.
Price,	$17.00	19.00	24.00	29.00	33.00	48.00	62.00	.....	.....	.....
Distance Face to Face,	8½ in.	9½ in.	8½ in.	10⅛ in.	11 in.	12½ in.	14¾ in.	17 in.	20 in.	23¾ in.
Diameter of Flanges,	6½ in.	7 in.	8 in.	9 in.	10 in.	11 in.	12 in.	14 in.	16 in.	19 in.

VULCANIZED
ASBESTOS DISC IRON BODY VALVES,
SCREWED AND FLANGED.

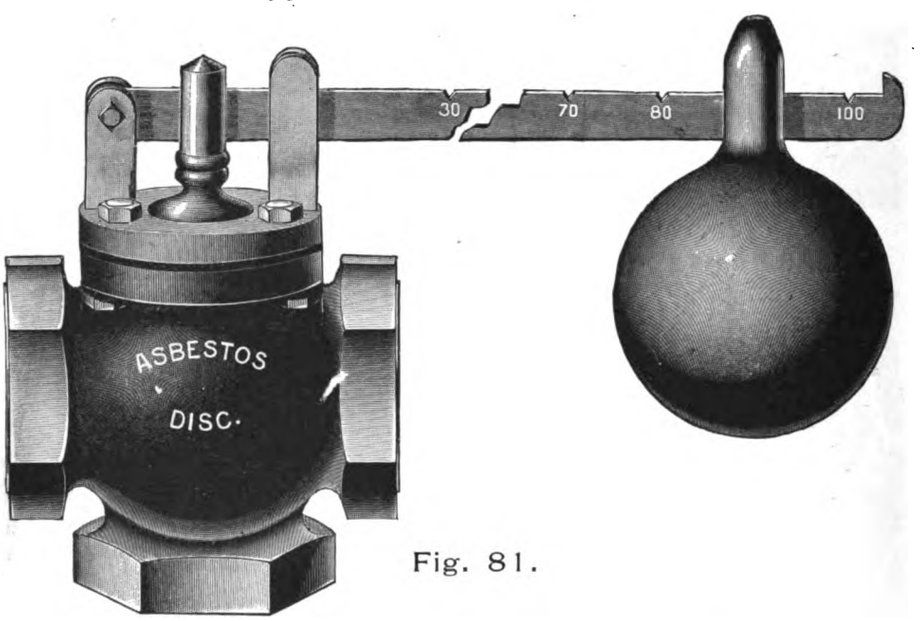


Fig. 81.

ASBESTOS DISC IRON BODY SAFETY VALVES, SCREWED.

Sizes.	1¼ in.	1½ in.	2 in.	2½ in.	3 in.	3½ in.	4 in.	5 in.	6 in.
Price,	$6.25	7.25	10.25	16.75	22.00	31.00	38.00	55.00	73.00
Distance End to End,	....	....	6 in.	8½ in.	8½ in.	9 in.	10½ in.	11½ in.	14 in.

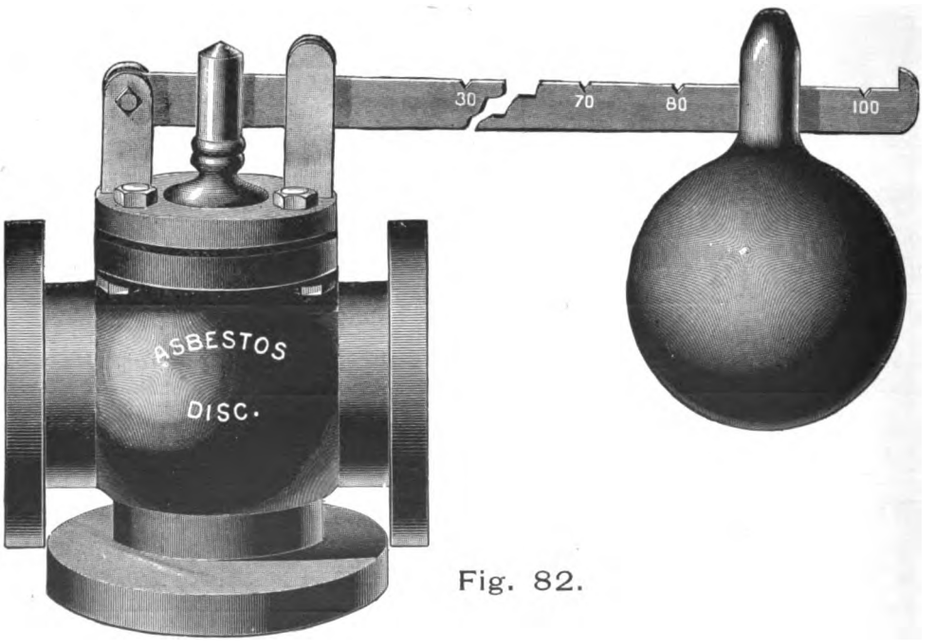


Fig. 82.

ASBESTOS DISC IRON BODY SAFETY VALVES, FLANGED.

Sizes.	2 in.	2½ in.	3 in.	3½ in.	4 in.	5 in.	6 in.
Price,	$12.25	19.00	25.50	34.00	41.00	62.00	80.00
Distance Face to Face,	8½ in.	9½ in.	8½ in.	10½ in.	11 in.	12½ in.	14½ in.
Diameter of Flanges,	6½ in.	7 in.	8 in.	9 in.	10 in.	11 in.	12 in.

VULCANIZED
ASBESTOS DISC IRON BODY VALVES,
SCREWED AND FLANGED.

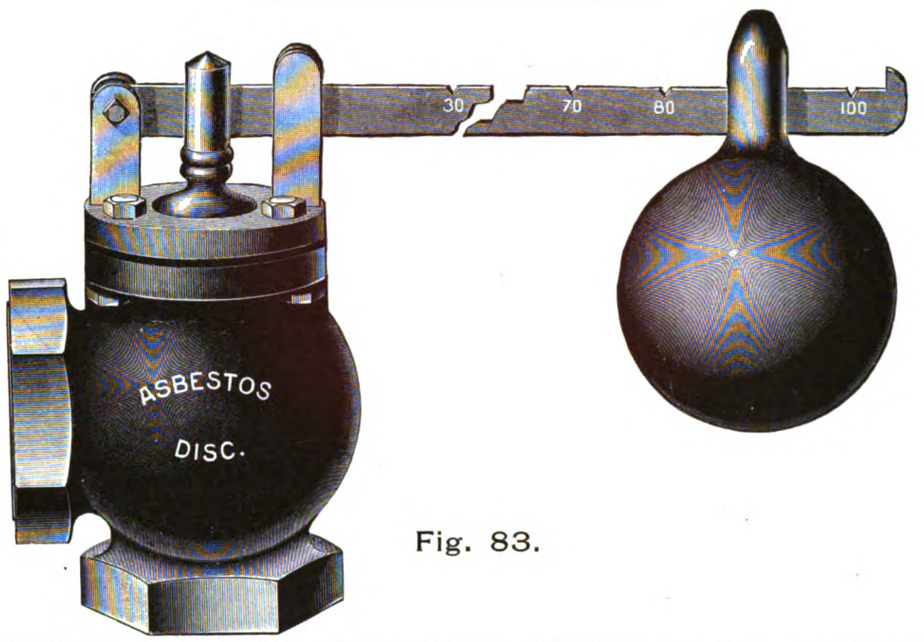


Fig. 83.

ASBESTOS DISC IRON BODY ANGLE SAFETY VALVES, SCREWED.

Sizes.	1¼ in.	1½ in.	2 in.	2½ in.	3 in.	3½ in.	4 in.	5 in.	6 in.
Price,	$6.25	7.25	10.25	16.75	22.00	31.00	38.00	55.00	73.00
Distance from Centre to Inlet or Outlet,	....	....	3 in.	4¼ in.	4⅛ in.	4½ in.	5¼ in.	5⅞ in.	7 in.

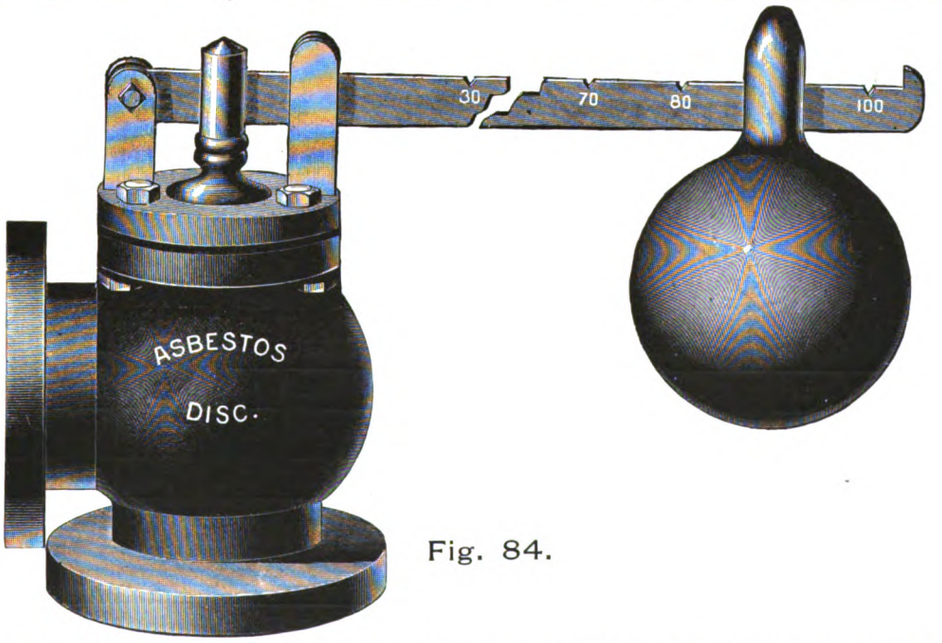


Fig. 84.

ASBESTOS DISC IRON BODY ANGLE SAFETY VALVES, FLANGED.

Sizes.	2 in.	2½ in.	3 in.	3½ in.	4 in.	5 in.	6 in.
Price,	$12.25	19.00	25.50	34.00	41.50	62.00	80.00
Distance from Centre to Inlet or Outlet,	4⅛ in.	4⅜ in.	4¼ in.	5 1/16 in.	5½ in.	6½ in.	7⅜ in.
Diameter of Flanges,	6½ in.	7 in.	8 in.	9 in.	10 in	11 in.	12 in.

STRAIGHTWAY SWINGING STOP VALVES,

IRON BODY, SCREWED, FLANGED AND BELL ENDS, BRASS, LEATHER OR ASBESTOS DISC.

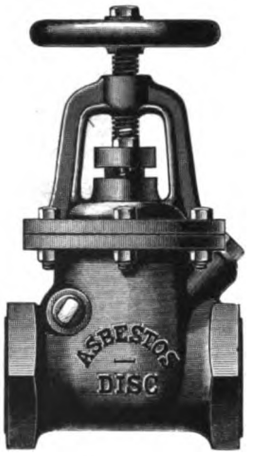


FIG. 85.

IRON BODY, STRAIGHTWAY SWINGING STOP VALVES, SCREWED.

SIZES.	2 in.	2½ in.	3 in.	3½ in.	4 in.	5 in.	6 in.	7 in.	8 in.	10 in.	12 in.	14 in.	16 in.
Price, . . .	$8.00	12.00	14.50	18.00	21.00	32.00	40.00	50.00	62.00	75.00	110.00	.....	....
Distance End to End,	5⅞ in.	7⅜ in.	8 in.	9¼ in.	10 in.	12 in.	13½ in.	14½ in.	15 in.	19⅜ in.	22½ in.	22⅝ in.	....

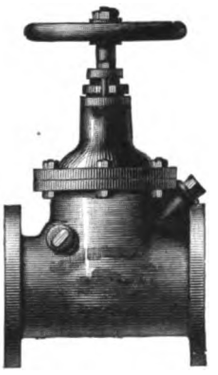


FIG. 86.

FIG. 87.

Fig. 86.

IRON BODY, STRAIGHTWAY SWINGING STOP VALVES, FLANGED.

SIZES.	2 in.	2½ in.	3 in.	3½ in.	4 in.	5 in.	6 in.	7 in.	8 in.	10 in.	12 in.	14 in.	16 in.
Price, . . .	$8.00	12.00	14.50	18.00	21.00	32.00	40.00	50.00	62.00	75.00	110.00	.....	....
Distance Face to Face,	8⅜ in.	8¼ in.	8 in.	9⅝ in.	10½ in.	11⅞ in.	13⅜ in.	14½ in.	15⅜ in.	19¾ in.	22¼ in.	22⅜ in.	....
Diameter of Flanges,	6 in.	7 in.	7 in.	8½ in.	9 in.	10 in.	11 in.	12 in.	13 in.	16 in.	18 in.	.....	....

Fig. 87.

IRON BODY, STRAIGHTWAY SWINGING STOP VALVES, BELL ENDS.

SIZES.	2 in.	3 in.	4 in.	5 in.	6 in.	7 in.	8 in.	10 in.	12 in.	14 in.	16 in.
Price, ...	$8.00	14.50	21.00	32.00	40.00	50.00	62.00	75.00	110.00	.....	.....
Depth of Bell, .	2¾ in.	2¾ in.	3 in.	3 in.	3 in.	3 in.	3 in.	3 in.	3¼ in.	3¼ in.	3½ in.
Distance End to End of Pipe when laid in Bell,	4 in.	6¾ in.	8½ in.	10½ in.	11½ in.	13½ in.	12¾ in.	17 in.	20½ in.	23 in.	33 in.

STRAIGHTWAY SWINGING CHECK VALVES,

IRON BODY, SCREWED, FLANGED AND BELL ENDS, BRASS, LEATHER OR ASBESTOS DISC.

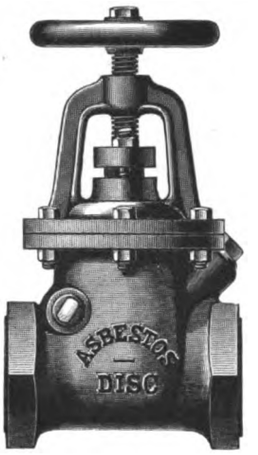


FIG. 88.

IRON BODY, STRAIGHTWAY SWINGING LOCK CHECK VALVES.

SIZES.	2 in.	2½ in.	3 in.	3½ in.	4 in.	5 in.	6 in.	7 in.	8 in.	10 in.	12 in.	14 in.	16 in.
Screwed, Flanged, Bell Ends,	$8.00	12.00	14.50	18.00	21.00	32.00	40.00	50.00	62.00	75.00	110.00	....	....

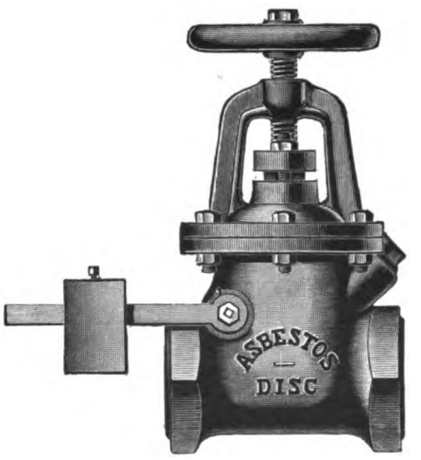


FIG. 89.

IRON BODY, STRAIGHTWAY SWINGING LOCK CHECK VALVES, BALANCED DISC.

SIZES.	2 in.	2½ in.	3 in.	3½ in.	4 in.	5 in.	6 in.	7 in.	8 in.	10 in.	12 in.	14 in.	16 in.
Screwed, Flanged, Bell Ends,	$8.00	12.00	14.50	18.00	21.00	32.00	40.00	50.00	62.00	75.00	110.00	....	....

STRAIGHTWAY SWINGING CHECK VALVES,

IRON BODY, SCREWED, FLANGED AND BELL ENDS, BRASS, LEATHER OR ASBESTOS DISC.

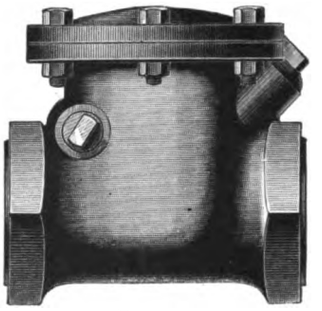


FIG. 90.

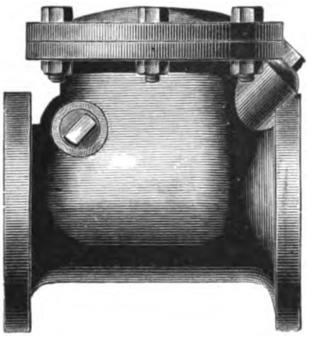


FIG. 91.

FIG. 92.

Fig. 90.

IRON BODY STRAIGHTWAY SWINGING CHECK VALVES, SCREWED.

SIZES.	2 in.	2½ in.	3 in.	3½ in.	4 in.	5 in.	6 in.	7 in.	8 in.	10 in.	12 in.	14 in.	16 in.
Price, ...	$6.25	10.00	12.00	16.00	18.00	25.00	32.00	41.00	50.00	65.00	95.00	....	....
Distance End to End,	5 in.	7⅞ in.	8 in.	9¼ in.	10 in.	12 in.	13½ in.	14½ in.	15 in.	19⅜ in.	22¼ in.	....	....

Fig. 91.

IRON BODY STRAIGHTWAY SWINGING CHECK VALVES, FLANGED.

SIZES.	2 in.	2½ in.	3 in.	3½ in.	4 in.	5 in.	6 in.	7 in.	8 in.	10 in.	12 in.	14 in.	16 in.
Price, ...	$6.25	10.00	12.00	16.00	18.00	25.00	32.00	41.00	50.00	65.00	95.00	....	....
Distance Face to Face,	8⅜ in.	8¼ in.	8 in.	9⅝ in.	10½ in.	11⅞ in.	13⅜ in.	14½ in.	15⅜ in.	19¾ in.	22½ in.	....	....
Diameter of Flanges,	6 in.	7 in.	7 in.	8½ in.	9 in.	10 in.	11 in.	12 in.	13 in.	16 in.	18 in.	....	....

Fig. 92.

IRON BODY STRAIGHTWAY SWINGING CHECK VALVES, BELL ENDS.

SIZES.	2 in.	3 in.	4 in.	5 in.	6 in.	7 in.	8 in.	10 in.	12 in.	14 in.	16 in.
Price, ...	$6.25	12.00	18.00	25.00	32.00	41.00	50.00	65.00	95.00	....	....
Depth of Bell, . .	2¾ in.	2¾ in.	3 in.	3 in.	3 in.	3 in.	3 in.	3 in.	3¼ in.	3¼ in.	3½ in.
Distance End to End of Pipe when laid in Bell,	4 in.	6¾ in.	8½ in.	10½ in.	11½ in.	13½ in.	12¾ in.	17 in.	20½ in.	23 in.	33 in.

STRAIGHTWAY SWINGING CHECK VALVES,

IRON BODY, SCREWED, FLANGED AND BELL ENDS, BRASS, LEATHER OR ASBESTOS DISC.

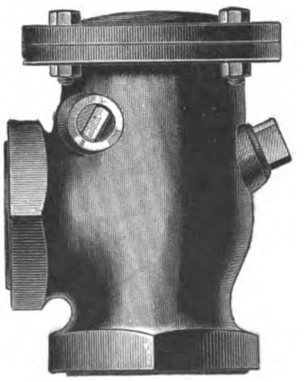


FIG. 93.

IRON BODY, ANGLE SWINGING CHECK VALVES, SCREWED.

SIZES.	2 in.	2½ in.	3 in.	3½ in.	4 in.	5 in.	6 in.	7 in.	8 in.	10 in.	12 in.	14 in.	16 in.
Price, . . .	$6.25	10.00	12.00	16.00	18.00	25.00	32.00	41.00	50.00	65.00	95.00	....	....

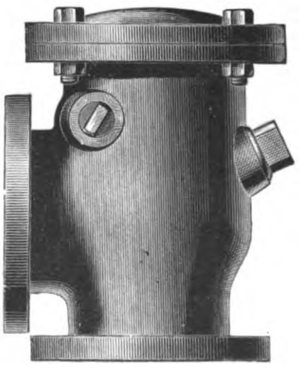


FIG. 94.

IRON BODY, ANGLE SWINGING CHECK VALVES, FLANGED.

SIZES.	2 in.	2½ in.	3 in.	3½ in.	4 in.	5 in.	6 in.	7 in.	8 in.	10 in.	12 in.	14 in.	16 in.
Price, . . .	$6.25	10.00	12.00	16.00	18.00	25.00	32.00	41.00	50.00	65.00	95.00	....	....
Diameter of Flanges,	6 in.	7 in.	7 in.	8½ in.	9 in.	10 in.	11 in.	12 in.	13 in.	16 in.	18 in.	....	....

STRAIGHTWAY SWINGING BACK PRESSURE VALVES,

IRON BODY, SCREWED AND FLANGED, WITH BRASS, LEATHER OR ASBESTOS DISC.

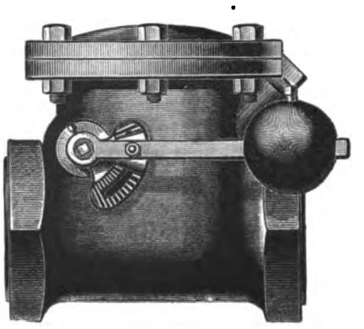


FIG. 95.

IRON BODY STRAIGHTWAY SWINGING BACK PRESSURE VALVES, SCREWED.

SIZES.	2 in.	2½ in.	3 in.	3½ in.	4 in.	5 in.	6 in.	7 in.	8 in.	10 in.	12 in.	14 in.	16 in.
Price, . . .	$6.25	10.00	12.00	16.00	18.00	25.00	32.00	41.00	50.00	65.00	95.00	....	....
Distance End to End,	5⅞ in.	7⅞ in.	8 in.	9¾ in.	10 in.	12 in.	13½ in.	14½ in.	15 in.	19⅝ in.	22½ in.	....	....

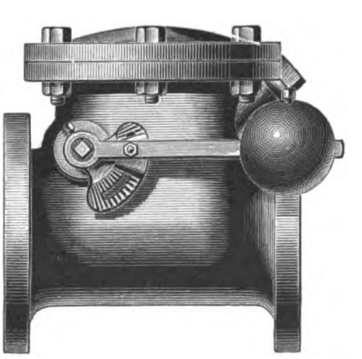


FIG. 96.

IRON BODY STRAIGHTWAY SWINGING BACK PRESSURE VALVES, FLANGED.

SIZES.	2 in.	2½ in.	3 in.	3½ in.	4 in.	5 in.	6 in.	7 in.	8 in.	10 in.	12 in.	14 in.	16 in.
Price, . . .	$6.25	10.00	12.00	16.00	18.00	25.00	32.00	41.00	50.00	65.00	95.00	....	....
Distance Face to Face,	8⅜ in.	8¼ in.	8 in.	9⅝ in.	10½ in.	11⅞ in.	13⅜ in.	14½ in.	15⅝ in.	19¾ in.	22¼ in.	....	....
Diameter of Flanges,	6 in.	7 in.	7 in.	8½ in.	9 in.	10 in.	11 in.	12 in.	13 in.	16 in.	18 in.	....	....

STRAIGHTWAY SWINGING CHECK VALVES,

ALL IRON, FOR AMMONIA.

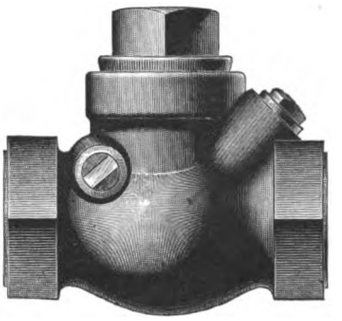


FIG. 97.

SCREWED ENDS.

SIZES.	½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.	2½ in.	3 in.
Price, . . .	$1.30	1.75	2.25	3.25	4.25	6.25	11.50	16.00

STRAIGHTWAY SWINGING CHECK VALVES,

ALL IRON, FOR AMMONIA.

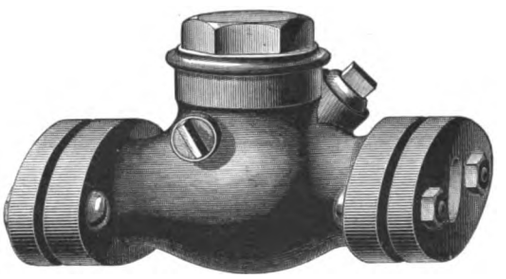


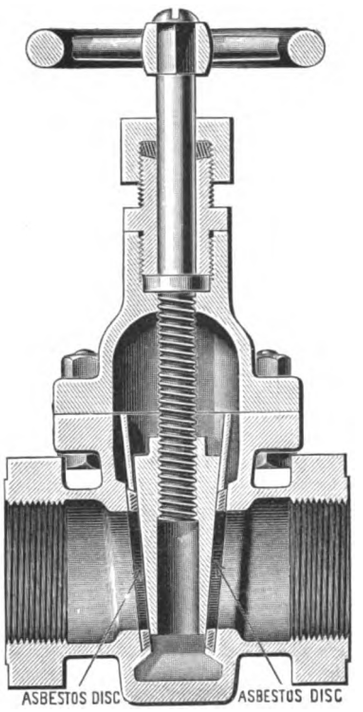
FIG. 98.

GLAND ENDS.

SIZES.	½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.	2½ in.	3 in.
Price, . . .	$2.00	2.50	3.50	4.50	6.00	8.00	15.00	20.00

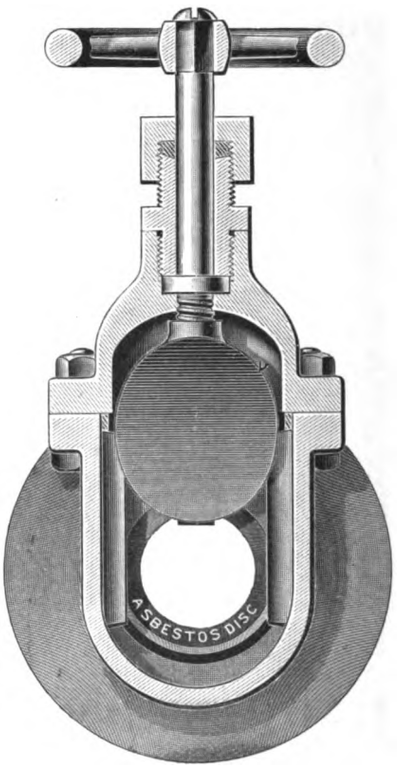
ASBESTOS DISC GATE VALVES,

BRASS AND IRON BODY, FLANGED, SCREWED, BELL OR SPIGOT ENDS.



SECTIONAL VIEW OF SCREWED END.

FIG. 99.



SECTIONAL VIEW OF FLANGED END.

FIG. 100.

WE would respectfully call the attention of the Trade and Public generally to the FAIRBANKS IMPROVED ASBESTOS DISC GATE VALVES. No expense has been spared in machinery and tools which would enable us to manufacture a standard straightway gate valve. The metals used in their manufacture are of the very best quality, and our aim and endeavor have been to furnish to valve users a gate valve with a straightway passage, having a full pipe area, and one which could be easily, quickly and cheaply repaired. These valves are heavy and strongly built, and have two guides on the inside which fit into grooves in the plug or gate, holding it central and preventing any unequal pressure from either side bending the stem. The plug or gate is cast solid, and is of a wedge shape. The angle of the two faces of the plug is such that, in combination with the grooves on the sides of the plug, it moves on the guides in the body of the valve, insuring the lifting of the plug free from the seats with a fractional turn of the spindle. They are double faced, and the pressure can be applied to either end. They will not stick or wedge fast, and can be easily opened and closed under pressure. The seat rings are made of Vulcabeston of an even thickness, are held securely in place, and can be easily, quickly and cheaply renewed. This is the same material that has been used so successfully in the celebrated Asbestos Disc Globe Valves and the Asbestos Packed Cocks. The stems or spindles are large in diameter. The packing nuts or stuffing boxes are packed with Vulcabeston Rope Packing. They are heavy, and so shaped that the packing is forced around the stem or spindle, making a perfectly tight joint. All valves are thoroughly tested before leaving the works with steam, and under a water pressure of 300 pounds per square inch. All parts of the valve are interchangeable. All valves are guaranteed. Non-rising spindles furnished unless otherwise ordered. All valves open by turning to the left and close by turning to the right, unless otherwise ordered. We are justified, from our experience in this line and the many severe trials and tests we have given to this valve, in making the following claims: **Best of Construction; Perfection of Workmanship; Nicety of Finish; Durability of Use; Simplicity of Repairs; and the only Double Faced Renewal Seat Gate Valve on the Market.**

AS ES.

ASBESTOS SEAT BRASS GATE VALVES, SCREWED.

Sizes, Inches,	⅜	½	¾	1	1¼	1½	2	2½	3
Price,	$1.25	1.60	2.20	2.80	4.00	5.50	8.00	15.75	22.00
Seat Ring,	.14	.18	.20	.24	.36	.50	.72	.96	1.20

ASBESTOS SEAT BRASS GATE VALVES FLANGED.

Sizes, Inches,	½	¾	1	1¼	1½	2	2½	3	
Price,	....	$5.00	6.00	9.00	11.00	16.50	25.00	34.00	....
Seat Ring,	....	.20	.24	.36	.50	.72	.96	1.20	....

ASBESTOS SEAT BRASS GATE VALVES, WITH SLIDING STEM AND LEVER.

Sizes, Inches,	⅜	½	¾	1	1¼	1½	2	2½	3
Screwed,	$2 00	$2.60	3.40	4.20	5.60	7.30	10.00	18.00	24.50
Flanged,	....	....	6.20	7.40	10.60	12.80	18.50	27.25	36.50
Seat Ring,	.14	.18	.20	.24	.36	.50	.72	.96	1.20

ASBESTOS SEAT BRASS GATE VALVES, WITH RISING STEM.

Sizes, Inches,	½	¾	1	1¼	1½	2	2½	3
Screwed,	$1.60	2.20	2.80	4.00	5.50	8.00	15.75	22.00
Flanged,	....	....	6.00	9.00	11.00	16.50	25.00	34.00
Seat Ring,	.18	.20	.24	.36	.50	.72	.96	1.20

Non-rising Spindles furnished unless otherwise ordered.
Unless otherwise ordered, all Valves open by turning to the left.

ASBESTOS SEAT IRON BODY GATE VALVES, WITH SCREWED BONNET.

Sizes, Inches,	½	¾	1	1¼	1½	2	2½	3	3½	4
Screwed,	$1.60	2.20	2.80	4.00	5.50	8.00	12.00	15.00	18.00	21.00
Flanged,	1.85	2.50	3.25	4.50	6.00	8.00	12.00	15.00	18.00	21.00
Seat Ring,	.18	.20	.24	.36	.50	.72	.96	1.20	1.50	1.80

ASBESTOS SEAT IRON BODY GATE VALVES, WITH BOLTED BONNET.

Sizes, In.,	2	2½	3	3½	4	4½	5	6	7	8	10	12
Screwed,	$8.00	12.00	15.00	18.00	21.00	25.00	30.00	36.00	50.00	62.00	....	....
Flanged,	8.00	12.00	15.00	18.00	21.00	25.00	30.00	36.00	50.00	62.00	85.00	120.00
Seat Ring,	.72	.96	1.20	1.50	1.80	2.00	2.40	3.00	3.60	4.20	5.40	6.00

ASBESTOS SEAT IRON BODY GATE VALVES, WITH BELL ENDS.

Sizes, Inches,	2	3	4	5	6	8	10	12
Price,	$8.00	15.00	21.00	30.00	36.00	62.00	85.00	120.00
Seat Ring,	.72	1.20	1.80	2.40	3.00	4.20	5.40	6.00

DIMENSIONS OF IRON BODY GATE VALVES.

Sizes, Inches,	2	2½	3	3½	4	5	6	7	8	10	12	14	16	18	20	24
Diameter of Flanges, In.,	6½	7	8	8½	9	10	11	12	13	16	18	21	23	25	27	31
Distance, End to End, "	5¾	6⅝	7½	8⅜	8⅜	9½	10	10⅜	11½	....	....	....	....	....	....	....
Distance, Face to Face, "	7¼	7⅞	8¾	8⅞	9¼	10½	10⅞	11⅞	12½	13¾	16¾	18	19	20	22	24

Sizes.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.	2½ in.	3 in.	3½ in.	4 in.
Price,	$5.00	6.00	9.00	11.00	16.50	25.00	34.00	....	....
Seat Ring,								....	....
Diameter of Flanges,	3 in.	4 in.	4½ in.	5 in.	6 in.	7 in.	7 in.	8½ in.	9 in.

ASBESTOS DISC BRASS GATE VALVES WITH SLIDING STEM AND LEVER.

Sizes.	⅜ in.	½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.	2½ in.	3 in.	3½ in.	4 in.
Screwed,	$2.00	2.60	3.40	4.20	5.60	7.30	10.00	18.00	24.50	....	....
Flanged,	....	....	6.20	7.40	10.60	12.80	18.50	27.25	36.50	....	....
Seat Ring,										....	....
Diameter of Flanges,	....	3 in.	3 in.	4 in.	4½ in.	5 in.	6 in.	7 in.	7 in.	8½ in.	9 in.

Non-Rising Spindles furnished unless otherwise ordered.
Unless otherwise ordered, all valves open by turning to the left.

VULCANIZED

ASBESTOS DISC BRASS GATE VALVES.

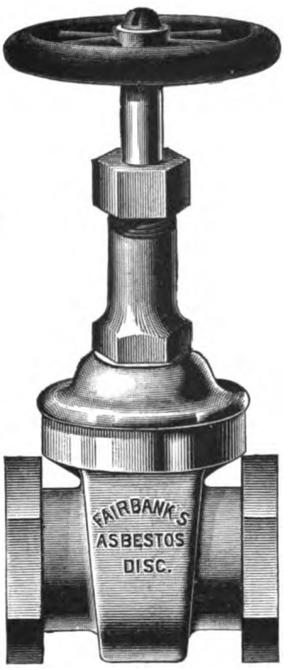


FIG. 103.

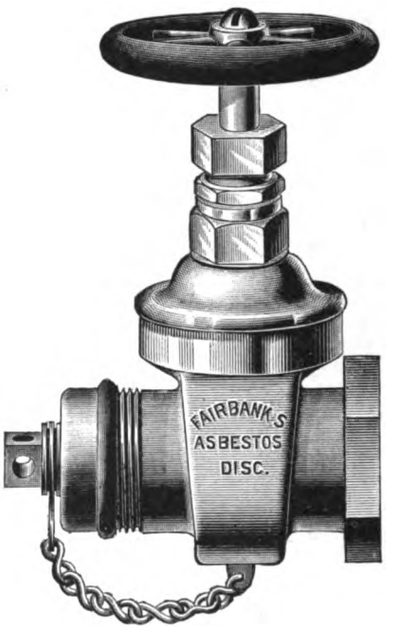


FIG. 104.

Fig. 103.

ASBESTOS DISC BRASS GATE VALVES, WITH RISING STEM.

SIZES.	½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.	2½ in.	3 in.
Screwed,	$1.60	2.20	2.80	4.00	5.50	8.00	15.75	22.00
Flanged,	....	....	6.00	9.00	11.00	16.50	25.00	34.00
Seat Ring,	.	.	.	.	.	.	.	.
Diameter of Flanges,	3 in.	3 in.	4 in.	4½ in.	5 in.	6 in.	7 in.	7 in.

Fig. 104.

ASBESTOS DISC BRASS GATE VALVES WITH HOSE THREAD.

SIZES.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.	2½ in.	3 in.
Screwed,	$2.20	2.80	4.00	5.50	8.00	15.75	22.00
Flanged,	....	6.00	9.00	11.00	16.50	25.00	34.00
Finished Brass Cap and Chain, Extra,	1.00	1.25	1.35	1.50	1.75	2.50	3.50
Seat Ring,	.	.	.	.	.	.	.
Diameter of Flanges,	3 in.	4 in.	4½ in.	5 in.	6 in.	7 in.	7 in.

Non-Rising Spindles furnished unless otherwise ordered.
Unless otherwise ordered, all valves open by turning to the left.

VULCANIZED

ASBESTOS DISC IRON BODY GATE VALVES.

FIG. 105.

FIG. 106.

Fig. 105.

ASBESTOS DISC ALL IRON GATE VALVES FOR AMMONIA AND ALKALIES.

SIZES.	½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.	2½ in.	3 in.	3½ in.	4 in.
Price, ...	....	....	....	....	....	....	....	....	....	....
Seat Ring, . . .	$0.									

PRICES ON APPLICATION.

Fig. 106.

ASBESTOS DISC IRON BODY GATE VALVES FOR WATER SERVICE.

SIZES.	½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.
Price, ...	....	....	....	....	....	....
Seat Ring, . . .	$0.					

All Iron Ammonia Gate Valves, Gland End, made. Prices on application.
Unless otherwise ordered, all valves open by turning to the left.

VULCANIZED

ASBESTOS DISC IRON BODY GATE VALVES,

SCREWED BONNET.

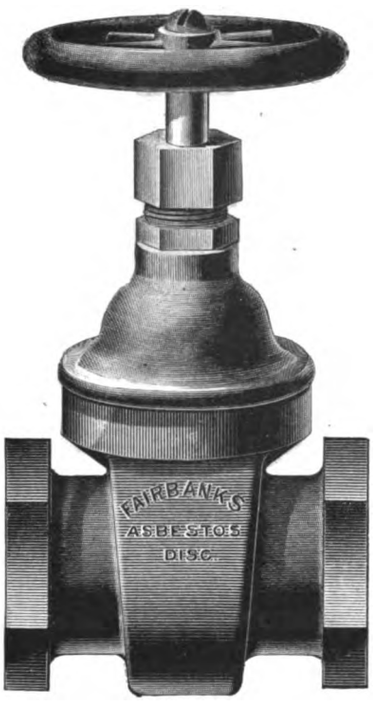


FIG. 107.

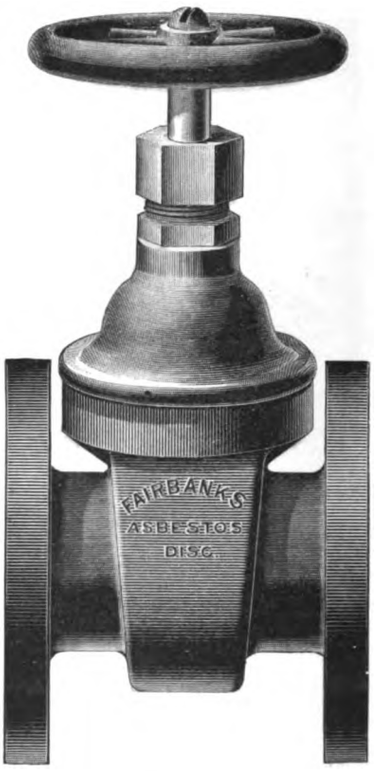


FIG. 108.

Fig. 107.

ASBESTOS DISC IRON BODY GATE VALVES, SCREWED.

SIZES.	½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.	2½ in.	3 in.	3½ in.	4 in.
Price,	$1.60	2.20	2.80	4.00	5.50	8.00	12.00	15.00	18.00	21.00
Seat Ring,										

Fig. 108.

ASBESTOS DISC IRON BODY GATE VALVES, FLANGED.

SIZES.	½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.	2½ in.	3 in.	3½ in.	4 in.
Price,	$1.85	2.50	3.25	4.50	6.00	8.00	12.00	15.00	18.00	21.00
Seat Ring,										
Diameter of Flanges,	3 in.	3 in.	4 in.	4½ in.	5 in.	6 in.	7 in.	7 in.	8½ in.	9 in.

Non-Rising Spindles furnished unless otherwise ordered.
Unless otherwise ordered, all valves open by turning to the left.

VULCANIZED

ASBESTOS DISC IRON BODY GATE VALVES,

BOLTED BONNET.

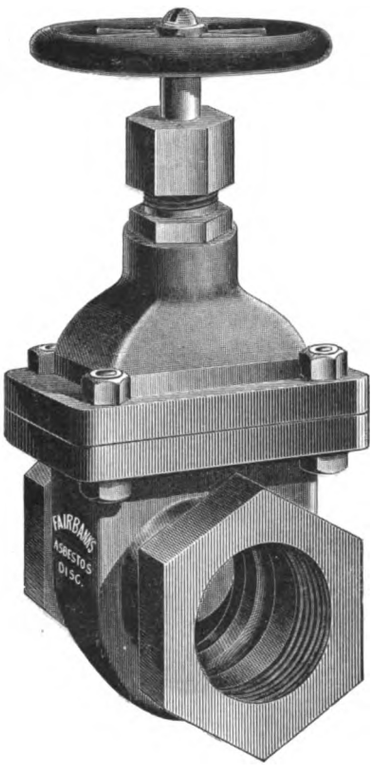


FIG. 109.

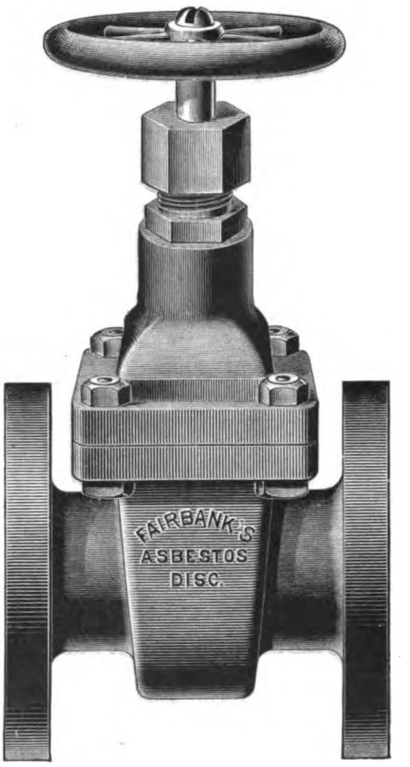


FIG. 110.

Fig. 109.

ASBESTOS DISC IRON BODY GATE VALVES, SCREWED.

SIZES.	2 in.	2½ in.	3 in.	3½ in.	4 in.	4½ in.	5 in.	6 in.	7 in.	8 in.	10 in.	12 in.
Price, ...	$8.00	12.00	15.00	18.00	21.00	25.00	30.00	36.00	50.00	62.00	....	....
Seat Ring, . . .											....	....

Fig. 110.

ASBESTOS DISC IRON BODY GATE VALVES, FLANGED.

SIZES.	2 in.	2½ in.	3 in.	3½ in.	4 in.	4½ in.	5 in.	6 in.	7 in.	8 in.	10 in.	12 in.	14 in.	16 in.	18 in.
Price, . .	$8.00	12.00	15.00	18.00	21.00	25.00	30.00	36.00	50.00	62.00	85.00	120.00	....	....	....
Seat Ring,													....	....	....
Diameter of Flanges,	6 in.	7 in.	7 in.	8½ in.	9 in.	9½ in.	10 in.	11 in.	12 in.	13 in.	16 in.	18 in.	21 in.	23 in.	25 in.

Non-Rising Spindles furnished unless otherwise ordered.
Unless otherwise ordered, all valves open by turning to the left.

VULCANIZED

ASBESTOS DISC IRON BODY GATE VALVES.

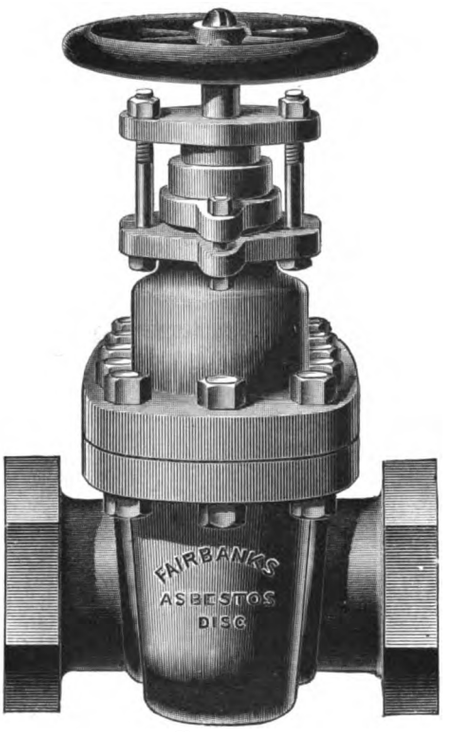


FIG. 111.

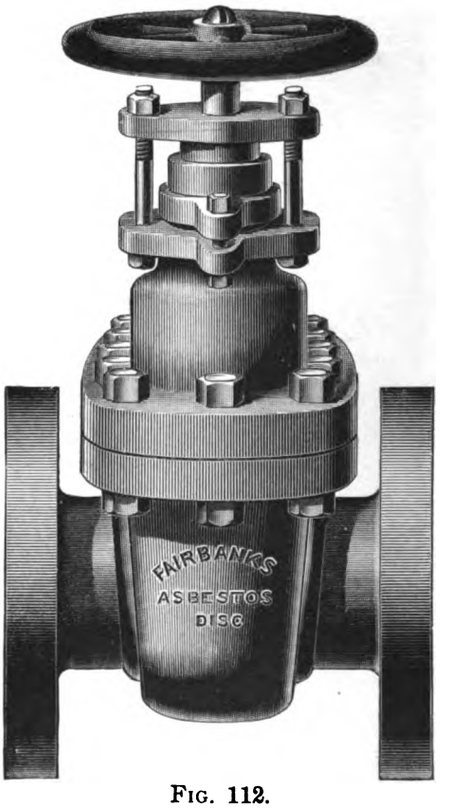


FIG. 112.

Fig. 111.

ASBESTOS DISC IRON BODY GATE VALVES FOR HEAVY PRESSURE, SCREWED.

SIZES.	2 in.	2½ in.	3 in.	3½ in.	4 in.	5 in.	6 in.	8 in.	10 in.	12 in.	14 in.
Screwed, . . .	....	....	....	....	....	....	....	....	....	....	....
Seat Ring, . .	$0.	.		.	..	..	..	.		....	....

Fig. 112.

ASBESTOS DISC IRON BODY GATE VALVES FOR HEAVY PRESSURE, FLANGED.

SIZES.	2 in.	2½ in.	3 in.	3½ in.	4 in.	5 in.	6 in.	8 in.	10 in.	12 in.	14 in.
Flanged, . . .	....	....	....	....	....	....	....	....	....	....	....
Seat Ring, . .	$0.									....	....
Diameter of Flanges,	....	7 in.	7 in.	8½ in.	9 in.	10 in.	11 in.	13 in.	16 in.	....	....

The above styles are not carried in stock. Prices on application.
In ordering, state what pressure they will be required to stand.
Unless otherwise ordered, all valves open by turning to the left.

VULCANIZED

ASBESTOS DISC IRON BODY GATE VALVES.

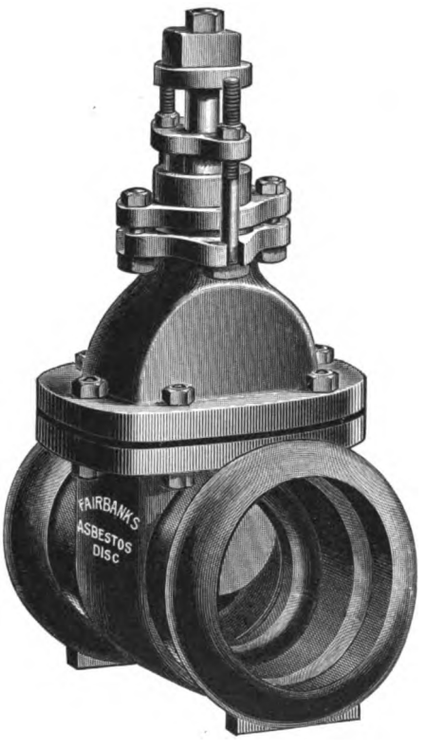


FIG. 113.

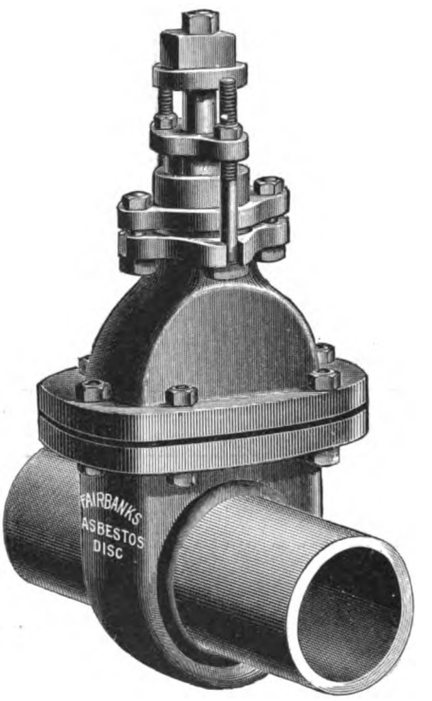


FIG. 114.

Fig. 113.

ASBESTOS DISC IRON BODY GATE VALVES, BELL ENDS.

SIZES.	2 in.	3 in.	4 in.	5 in.	6 in.	8 in.	10 in.	12 in.	14 in.
Price, ...	$8.00	15.00	21.00	30.00	36.00	62.00	85.00	120.00	....
Seat Ring, ...									....

Fig. 114.

ASBESTOS DISC IRON BODY GATE VALVES, SPIGOT ENDS.

SIZES.	2 in.	3 in.	4 in.	5 in.	6 in.	8 in.	10 in.	12 in.	14 in.
Price, ...	$8.00	15.00	21.00	30.00	36.00	62.00	85.00	120.00	....
Seat Ring, ...									....

Non-Rising Spindles furnished unless otherwise ordered.

Unless otherwise ordered, all valves open by turning to the left.

ASBESTOS PACKED BRASS COCKS.

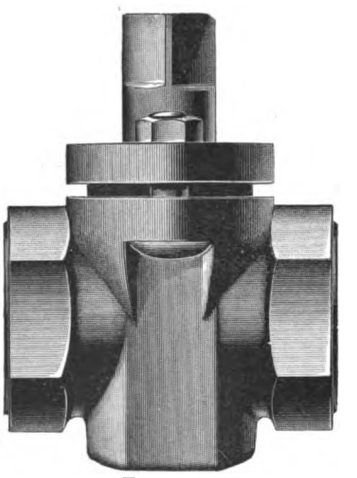


FIG. 115.

SCREWED.

SIZES.	¼ in.	⅜ in.	½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.	2½ in.	3 in.	3½ in.	4 in.
Price,	$2.00	2.25	2.50	3.15	4.20	6.00	7.75	12.00	20.00	28.00	....	....
Distance End to End,	2⅜ in.	2⅞ in.	2⅞ in.	3⅛ in.	4 in.	4½ in.	5 in.	6 in.	6¾ in.	8½ in.	....	....

ASBESTOS PACKED BRASS COCKS.

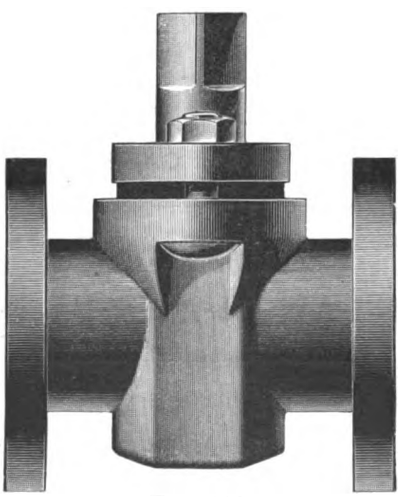


FIG. 116.

FLANGED.

SIZES.	1½ in.	2 in.	2½ in.	3 in.	3½ in.	4 in.
Price,	....	....	....	....	....	....
Distance Face to Face,	....	....	....	....	....	....
Diameter of Flanges,	....	....	....	....	....	....

Prices on application.

ASBESTOS PACKED BRASS COCKS.

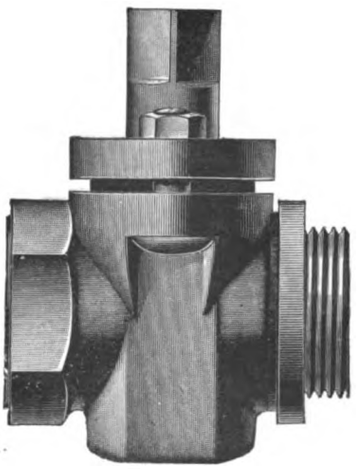


FIG. 117.

ASBESTOS PACKED BRASS HOSE COCKS, SCREWED.

SIZES.	1½ in.	2 in.	2½ in.
Price, ...	.....	.....	.....
Distance End to End, ...	.....	.....	.....

ASBESTOS PACKED BRASS COCKS.

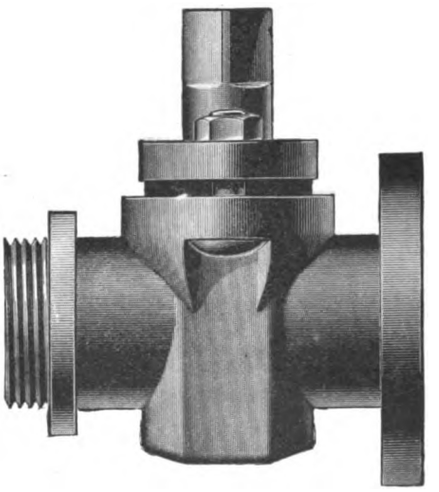


FIG. 118.

ASBESTOS PACKED BRASS HOSE COCKS, FLANGED.

SIZES.	1½ in.	2 in.	2½ in.
Price, ...	.....	.....	.....
Distance End to Face, ...	.....	.....	.....
Diameter of Flanges, ...	.....	.....	.....

The above styles are not carried in stock. Prices on application.

ASBESTOS PACKED BRASS COCKS.

FIG. 119.

LOCOMOTIVE PATTERN.

PRICES ON APPLICATION.

ASBESTOS PACKED BRASS COCKS.

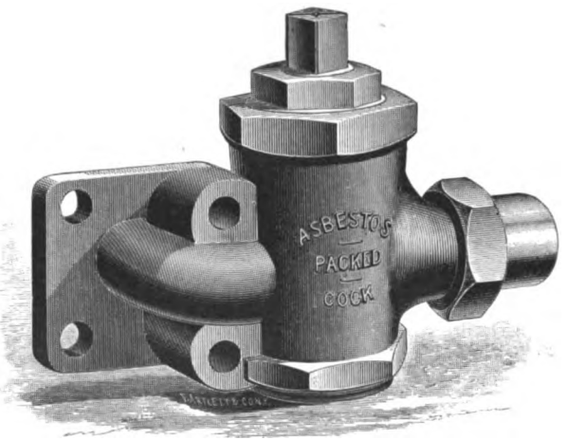


FIG. 120.

LOCOMOTIVE PATTERN.

PRICES ON APPLICATION.

These cocks combine all the advantages of the regular asbestos packed cocks, with the addition of the plug being fitted to the barrel so as to make a perfectly tight steam joint and equal to the best ground plug brass cocks. Under high pressures of steam they are found to be far superior to the regular, turning easy and remaining tight.

ASBESTOS PACKED BRASS COCKS.

FIG. 121.

REGULAR PATTERN, WITH SCREWED GLAND.

PRICES ON APPLICATION.

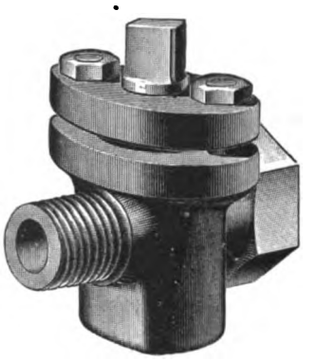


FIG. 122.

MALE AND FEMALE THREADS.

SPECIAL.

PRICES ON APPLICATION.

ASBESTOS PACKED BRASS COCKS.

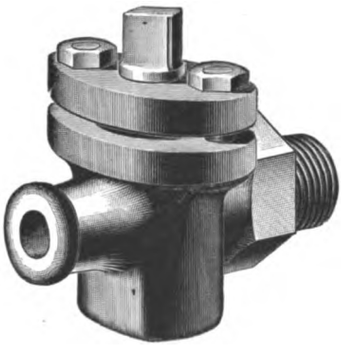


FIG. 123.

MALE THREAD AND DRIP END.

SPECIAL.

PRICES ON APPLICATION.

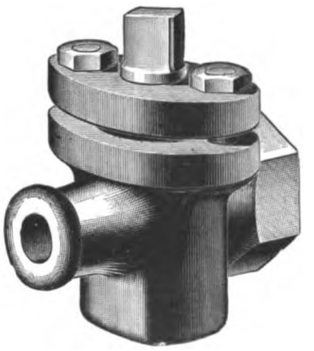


FIG. 124.

FEMALE THREAD AND DRIP END.

SPECIAL.

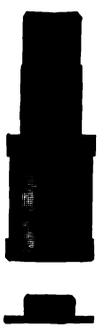
PRICES ON APPLICATION.

ASBESTOS PACKED BRASS AND ALL IRON COCKS,

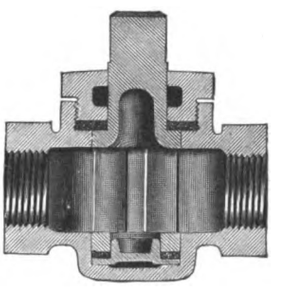
SCREWED, FLANGED AND GLAND ENDS.

THE following sectional and cut away views show the construction and location of the slots in the Asbestos Packed Cocks now being widely used as Boiler Blow-Offs, and in fact in all places where the regular cock and valve have been found wanting. The plug comes in contact only with Vulcanized Asbestos which is hydraulically packed in four slots in the body of the cock. It also has an Asbestos Washer or Ring above and below, thereby preventing its bearing against or touching the metal at any point, and overcoming the objectionable features of metal bearing cocks. The plugs are all barffed and rendered rustless. Being tested, the regular cocks are guaranteed to stand a pressure of 300 pounds, and they not only remain tight but turn easily. The following styles are carried in stock: Regular Steam Cocks, Gland End Ammonia Cocks, Extra Heavy Cocks for Hydraulic Pressures, Super-Heated Steam Cocks tested on 1000° Super-Heated Steam, and Stop and Waste Cocks. They can be and are used on Steam, Water, Gas, Oil, Air, Ammonia, Caustic Soda, and in fact in any place where other Cocks and Valves are not satisfactory. All goods guaranteed and samples furnished for trial.

ASBESTOS PACKED IRON COCKS.

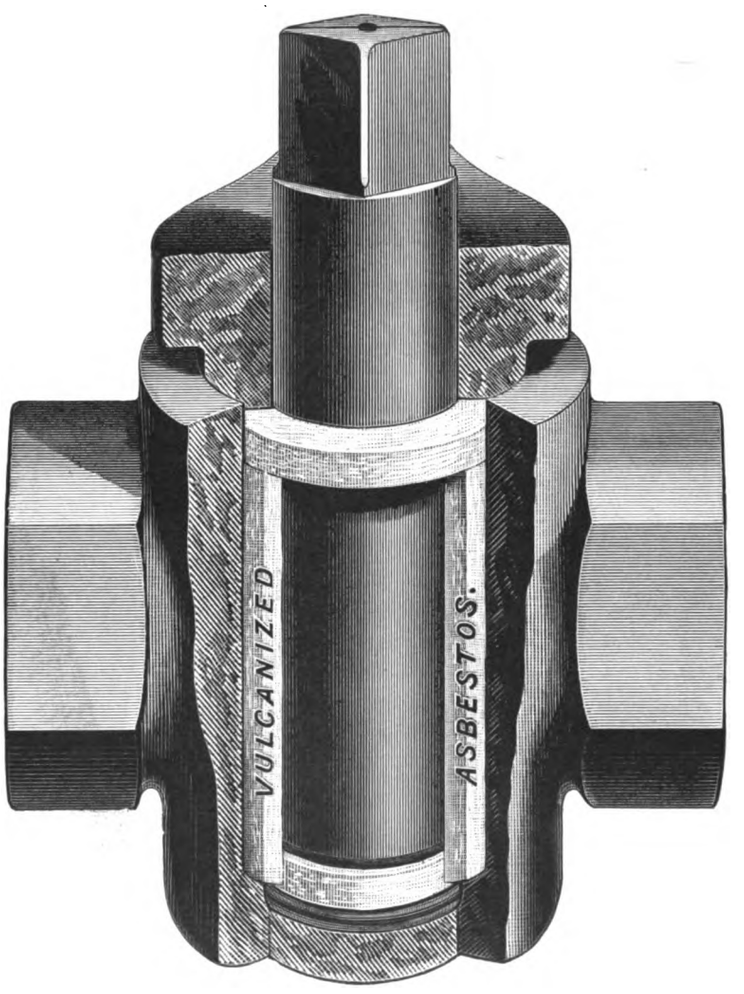


Plug and Thimble,
D.



Sectional View,
E.

View showing Location of Slots,
F.



G.

ALL IRON, BARFFED PLUGS.

ASBESTOS PACKED IRON COCKS.

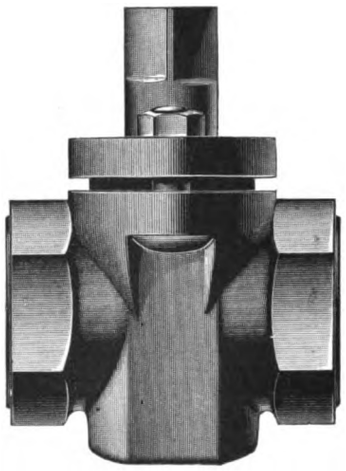


FIG. 125.

ALL IRON, ASBESTOS PACKED COCKS, BARFFED PLUGS, SCREWED.

SIZES.	¼ in.	⅜ in.	½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.
Price,	$1.30	1.45	1.60	2.10	2.50	3.50	4.75	7.00
Distance End to End,	2⅜ in.	2⅞ in.	2⅞ in.	3⅜ in.	4 in.	4 9/16 in.	5⅛ in.	6½ in.

ASBESTOS PACKED IRON COCKS.

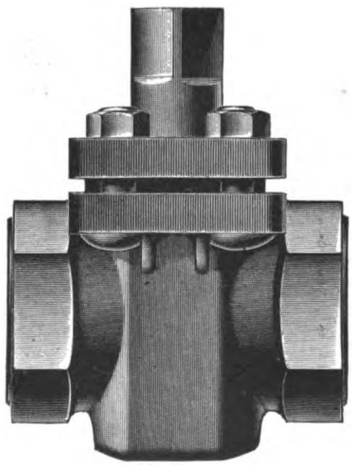


FIG. 126.

ALL IRON, ASBESTOS PACKED COCKS, BARFFED PLUGS, SCREWED.

SIZES.	2½ in.	3 in.	3½ in.	4 in.	5 in.	6 in.	8 in.
Price,	$12.00	18.00	27.00	30.00	45.00	60.00	.....
Distance End to End,	7 in.	8¾ in.	9½ in.	10⅞ in.	12⅝ in.	14¾ in.	.....

ASBESTOS PACKED IRON COCKS.

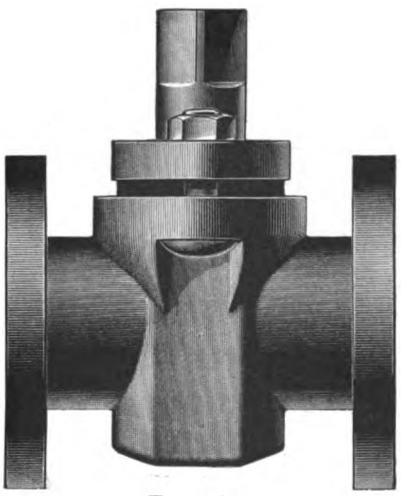


FIG. 127.

ALL IRON, ASBESTOS PACKED COCKS, BARFFED PLUGS, FLANGED.

SIZES.	1¼ in.	1½ in.	2 in.
Price,	$3.50	4.75	7.00
Distance Face to Face,	.....	5⅞ in.	7⅛ in.
Diameter of Flanges,	5 in.	6 in.	7 in.

ASBESTOS PACKED IRON COCKS.

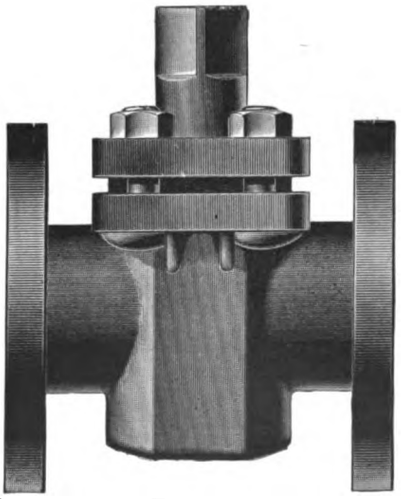


FIG. 128.

ALL IRON, ASBESTOS PACKED COCKS, BARFFED PLUGS, FLANGED.

SIZES.	2½ in.	3 in.	3½ in.	4 in.	5 in.	6 in.	8 in.
Price,	$12.00	18.00	27.00	30.00	45.00	60.00	....
Distance Face to Face,	8¼ in.	9¼ in.	10¼ in.	11½ in.	13¾ in.	16 in.	19¾ in.
Diameter of Flanges,	7 in.	7 in.	8½ in.	9 in.	10 in.	11 in.	13 in.

ASBESTOS PACKED IRON COCKS.

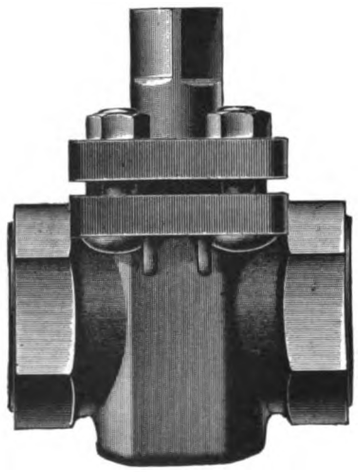


FIG. 129.

ASBESTOS PACKED SUPER-HEATED COCKS, SCREWED.

SIZES.	½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.	2½ in.	3 in.	3½ in.	4 in.
Price,	$2.10	2.50	3.50	4.75	7.00	12.00	18.00	27.00	30.00	45.00
Distance End to End,	3⅜ in.	4 in.	4⅝ in.	5½ in.	6½ in.	7 in.	8¾ in.	9½ in.	10⅞ in.	12⅝ in.

ASBESTOS PACKED IRON COCKS.

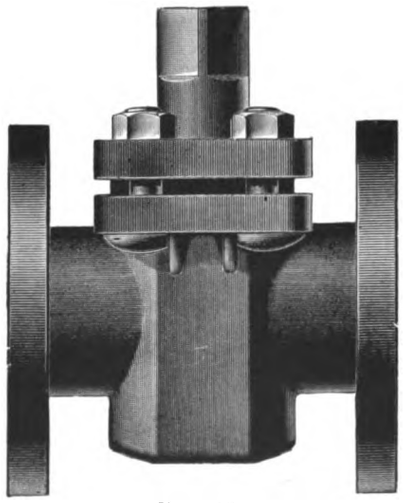


FIG. 130.

ASBESTOS PACKED SUPER-HEATED COCKS, FLANGED.

SIZES.	1½ in.	2 in.	2½ in.	3 in.	3½ in.	4 in.
Price,	$7.00	12.00	18.00	27.00	30.00	45.00
Distance Face to Face,	7⅛ in.	8¼ in.	9¼ in.	10¼ in.	11½ in.	13¾ in.
Diameter of Flanges,	6 in.	7 in.	7 in.	7 in.	8½ in.	9 in.

ASBESTOS PACKED IRON COCKS.

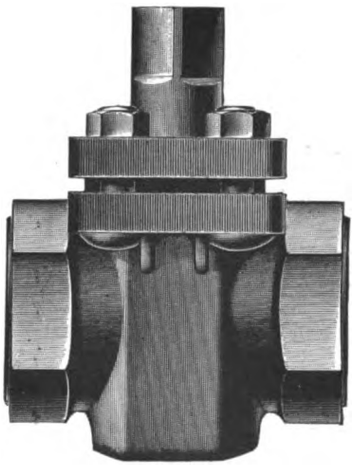


FIG. 131.

ASBESTOS PACKED EXTRA HEAVY COCKS, SCREWED.

SIZES.	½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.	2½ in.	3 in.	3½ in.	4 in.	5 in.	6 in.
Price,	$2.10	2.50	3.50	4.75	7.00	12.00	18.00	27.00	30.00	45.00	60.00	....
Distance End to End,	....	....	....	....	....	....	....	....	....	....	....	....

ASBESTOS PACKED IRON COCKS.

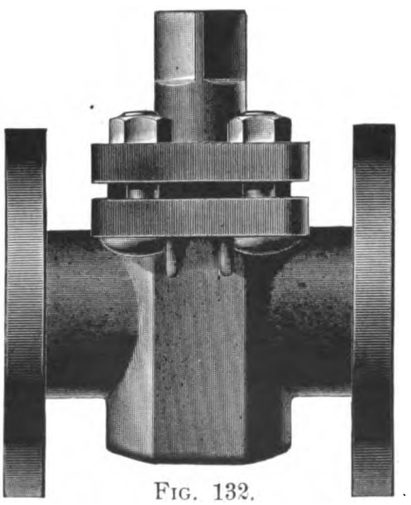


FIG. 132.

ASBESTOS PACKED EXTRA HEAVY COCKS, FLANGED.

SIZES.	1¼ in.	1½ in.	2 in.	2½ in.	3 in.	3½ in.	4 in.	5 in.	6 in.
Price,	$4.75	7.00	12.00	18.00	27.00	30.00	45.00	60.00	....
Distance Face to Face,	....	....	.....	.....	.....	.....	.....	.....	....
Diameter of Flanges,	....	6 in.	7 in.	7 in.	7 in.	8½ in.	9 in.	10 in.	11 in.

ASBESTOS PACKED IRON COCKS.

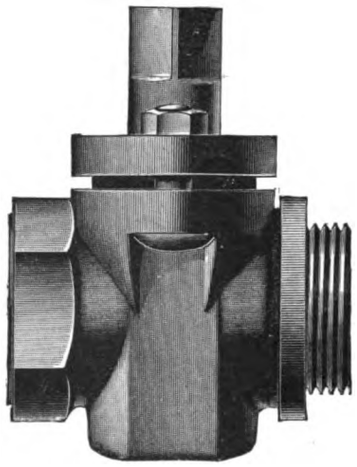


FIG. 133.

ASBESTOS PACKED HOSE COCKS, SCREWED.

SIZES.	1¼ in.	1½ in.	2 in.	2½ in.
Price,	$4.75	7.00	12.00	18.00
Distance End to End,	4 9/16 in.	5⅛ in.	6½ in.	7 in.

ASBESTOS PACKED IRON COCKS.

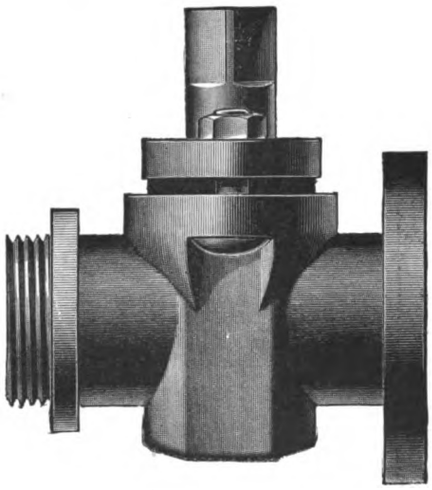


FIG. 134.

ASBESTOS PACKED HOSE COCKS, FLANGED.

SIZES.	1½ in.	2 in.	2½ in.
Prices,	$7.00	12.00	18.00
Distance End to Face,	5⅞ in.	7⅛ in.	8¼ in.
Diameter of Flange,	6 in.	7 in.	7 in.

ASBESTOS PACKED IRON COCKS.

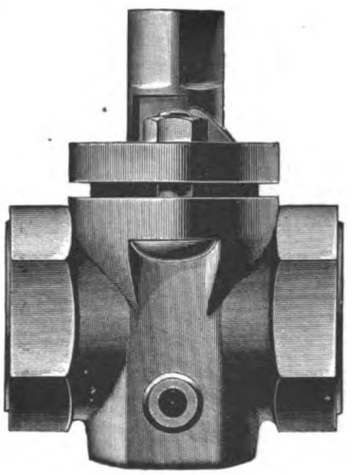


FIG. 135.

ASBESTOS PACKED STOP AND WASTE COCKS, SCREWED AND FLANGED.

SIZES.	¼ in.	⅜ in.	½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.	2½ in.	3 in.	3½ in.	4 in.
Screwed, ...	$1.30	1.45	1.60	2.10	2.50	3.50	4.75	7.00	12.00	18.00	27.00	30.00
Flanged, ...	....	....	....	....	....	3.50	4.75	7.00	12.00	18.00	27.00	30.00

MEASUREMENTS SAME AS REGULAR.

ASBESTOS PACKED IRON COCKS.

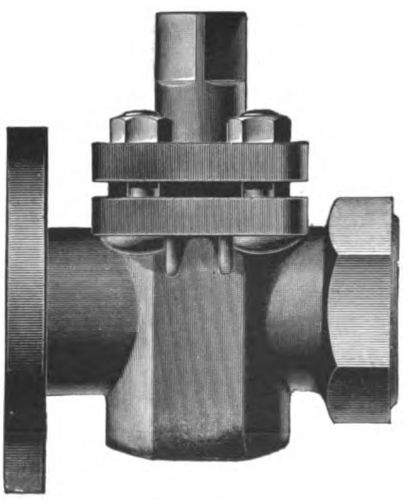


FIG. 136.

ASBESTOS PACKED COCKS, WITH FLANGE AND SCREW END.

PRICES ON APPLICATION. ALL SIZES TO ORDER.

ASBESTOS PACKED IRON COCKS.

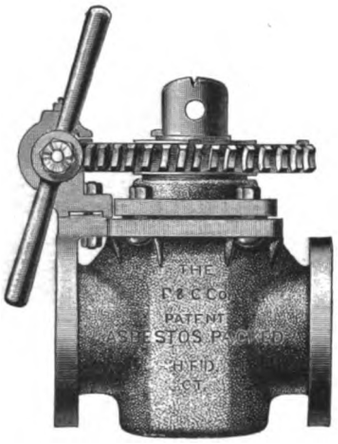


FIG. 137.

WITH WORM AND GEAR.

SIZES.	2½ in.	3 in.	3½ in.	4 in.	5 in.	6 in.	8 in.
Screwed, ...	$25.00	30.00	35.00	45.00	65.00	75.00	200.00
Flanged, ...	25.00	30.00	35.00	45.00	65.00	75.00	200.00
Diameter of Flanges, ...	7 in.	7 in.	8½ in.	9 in.	10 in.	11 in.	13 in.

ASBESTOS PACKED IRON COCKS.

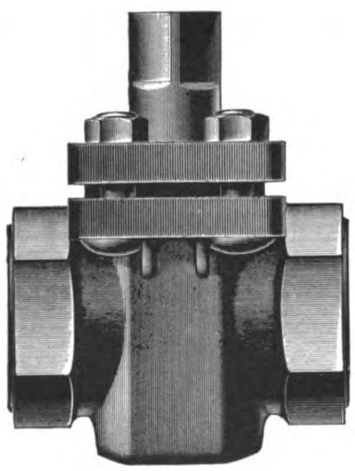


FIG. 138.

SCREWED AND FLANGED, WITH ROUND HOLE IN PLUG.

SIZES.	¼ in.	⅜ in.	½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.	2½ in.	3 in.	3½ in.	4 in.	5 in.	6 in.
Screwed, . .	...	...	...	...	...	....	....	....	....	....	....	....	....	....
Flanged, . .	...	...	...	...	...	....	....	....	....	....	....	....	....	....
Diameter of Flanges,	...	...	...	...	...	....	6 in.	7 in.	7 in.	7 in.	8½ in.	9 in.	10 in.	11 in.

PRICES ON APPLICATION.

ASBESTOS PACKED IRON COCKS.

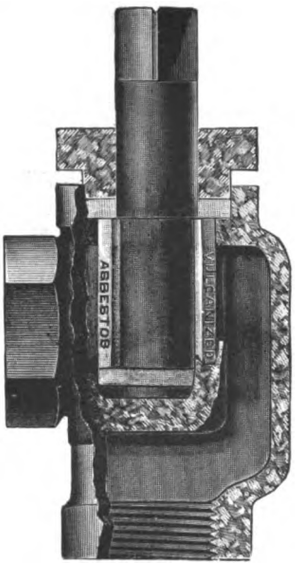


FIG. 139.
Sectional View.

ASBESTOS PACKED ANGLE COCK, SCREWED.

ASBESTOS PACKED IRON COCKS.

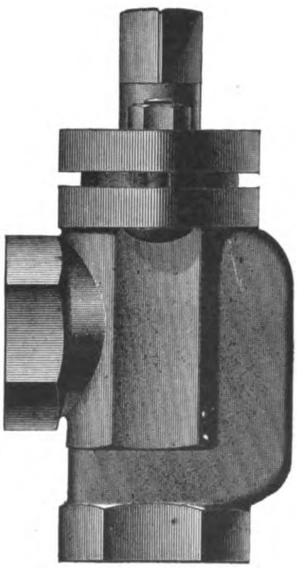


FIG. 140.

ASBESTOS PACKED ANGLE COCKS, SCREWED AND FLANGED.

SIZES.	½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.	2½ in.	3 in.
Screwed,	$2.10	2.50	3.50	4.75	7.00	12.00	18.00	27.00
Flanged,	....	....	....	....	7.00	12.00	18.00	27.00
Diameter of Flanges,	....	....	....	....	6 in.	7 in.	7 in.	7 in.

ASBESTOS PACKED IRON COCKS.

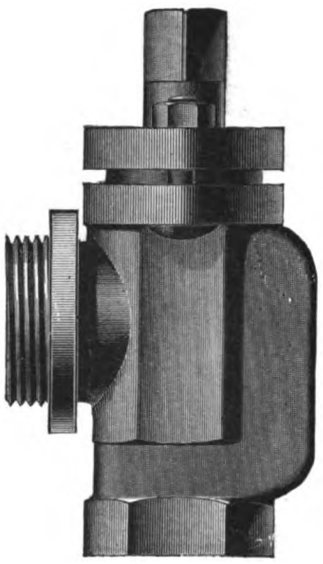


FIG. 141.

ASBESTOS PACKED ANGLE HOSE COCK, SCREWED AND FLANGED.

SIZES.	1½ in.	2 in.	2½ in.
Screwed,	$7.00	12.00	18.00
Flanged,	7.00	12.00	18.00
Diameter of Flanges,	6 in.	7 in.	7 in.

ASBESTOS PACKED IRON COCKS.

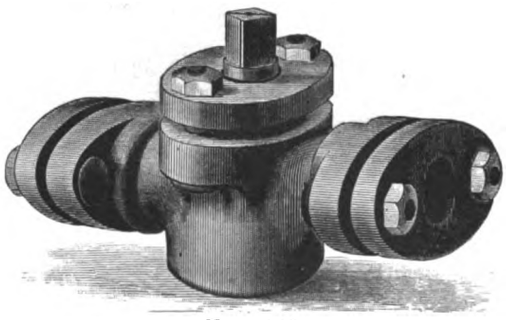


FIG. 142.

ASBESTOS PACKED AMMONIA COCKS, GLAND END.

SIZES.	¼ in.	⅜ in.	½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.	2½ in.	3 in.
Price,	$1.45	1.60	2.10	2.50	3.50	4.75	7.00	12.00	18.00	27.00

ASBESTOS PACKED IRON COCKS.

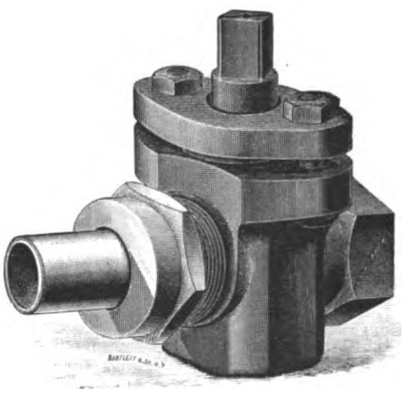


FIG. 143.

ASBESTOS PACKED IRON COCK, WITH BRASS UNION.

MADE TO ORDER. PRICES ON APPLICATION.

FIG. 144.

MALLEABLE IRON WRENCHES.

SIZES.	¼ in.	⅜ in.	½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.	2½ in.	3 in.	3½ in.	4 in.
Price, . .	$0.10	.10	.10	.20	.20	.30	.40	.50	1.00	1.50	1.60	1.75

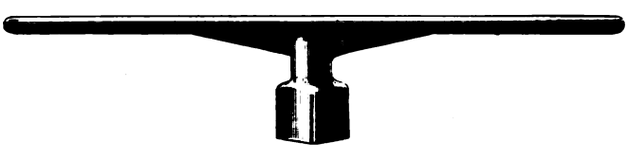


FIG. 145.

DOUBLE IRON WRENCH.

MADE TO ORDER. PRICES ON APPLICATION.

ASBESTOS PACKED IRON COCKS.

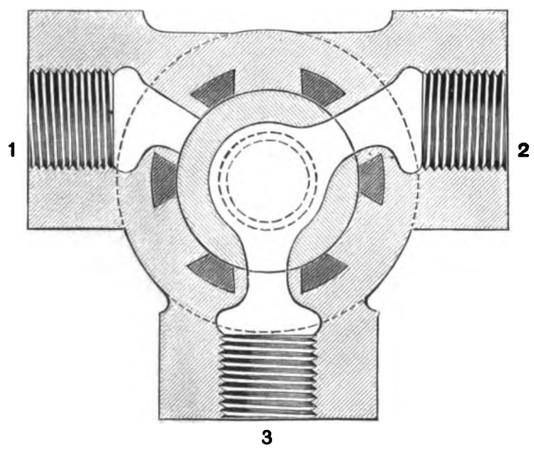


FIG. 146.

SECTIONAL VIEW OF **A** PATTERN.

THREE-WAY ASBESTOS PACKED COCKS.

This Cock has two openings in the Plug, with six packings in the Barrel, and will open and close as follows:

Port 1 to Port 2, closing Port 3, or Port 1 to Port 3, closing Port 2, or Port 2 to Port 3, closing Port 1.

It will close off all three Ports, and will open or close either Port before opening or closing the other. All three Ports can never be opened at once.

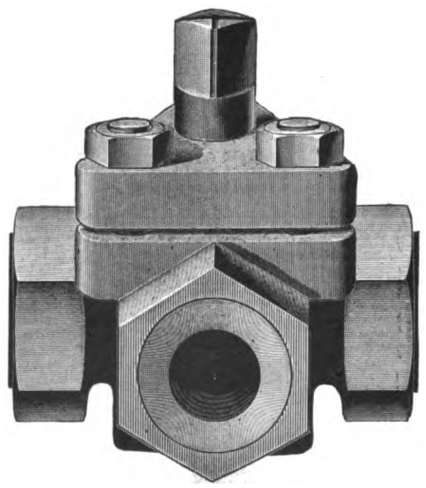


FIG. 147.

A PATTERN.

ASBESTOS PACKED THREE-WAY COCKS, SCREWED AND FLANGED.

SIZES.	½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.	2½ in.	3 in.	3½ in.	4 in.	5 in.	6 in.
Screwed, ...	$3.75	5.25	7.25	10.00	18.00	25.00	30.00	35.00	50.00	.....	.....	.....
Flanged, ...	....	....	....	.....	20.00	28.00	35.00	45.00	60.00	.....	.....	.....
Diameter of Flanges, . .	....	....	....	.....	6 in.	7 in.	7 in.	7 in.	8½ in.	9 in.	10 in.	11 in.

ASBESTOS PACKED IRON COCKS.

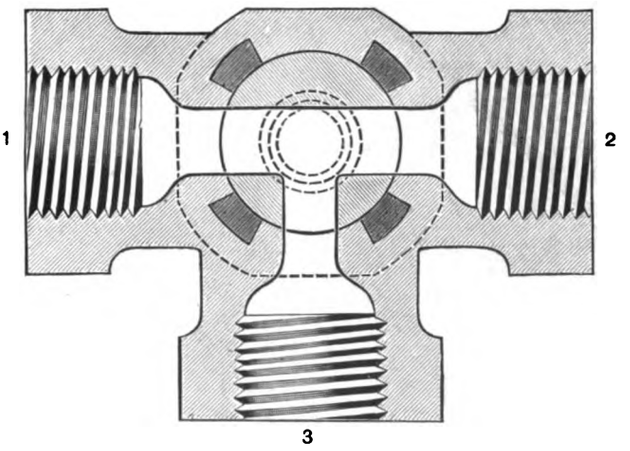


FIG. 148.

SECTIONAL VIEW OF **B** PATTERN.

THREE-WAY ASBESTOS PACKED COCKS.

This Cock has three openings in the Plug, with four packings in the barrel, and will open and close as follows:

Port 1 to Ports 2 and 3, opening all, or Port 1 to Port 3, closing Port 2, or Port 1 to Port 2, closing Port 3.

It will close but one Port at a time, and always has two Ports open.

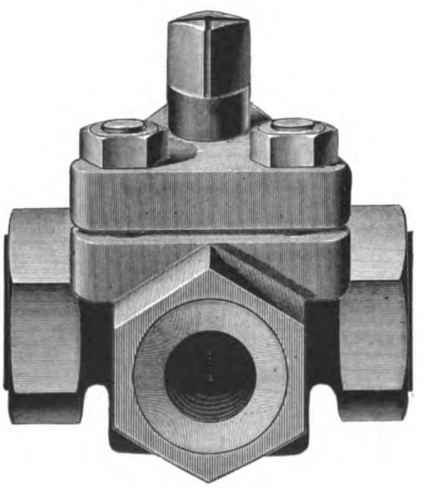


FIG. 149.

B PATTERN.

ASBESTOS PACKED THREE-WAY COCKS, SCREWED AND FLANGED.

SIZES.	¼ in.	⅜ in.	½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.	2½ in.	3 in.	3½ in.	4 in.	5 in.	6 in.
Screwed, . .	$3.00	3.25	3.75	5.25	7.25	10.00	18.00	25.00	30.00	35.00	50.00	.....	.....	.....
Flanged, . .	....	....	....	....	....	.....	20.00	28.00	35.00	45.00	60.00	.....	.....	.....
Diameter of Flanges,	....	....	....	....	....	.....	6 in.	7 in.	7 in.	7 in.	8½ in.	9 in.	10 in.	11 in.

ASBESTOS PACKED IRON COCKS.

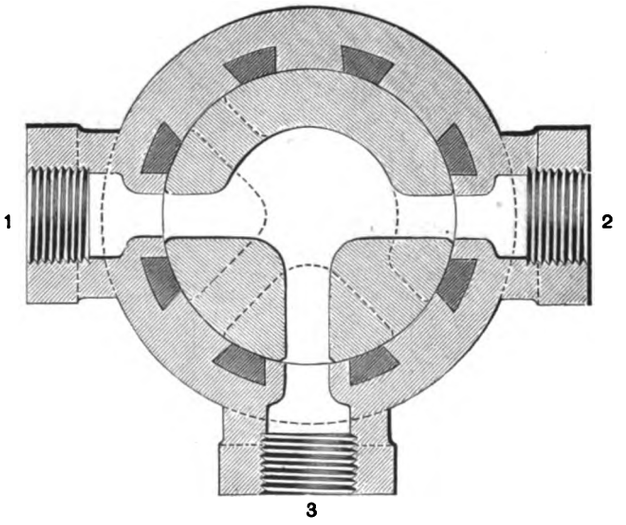


FIG. 150.

SECTIONAL VIEW OF **C** PATTERN.

ASBESTOS PACKED THREE-WAY COCKS.

This Cock has three openings in the Plug, with eight packings in the Barrel, and will open and close as follows:

Port 1 to Ports 2 and 3, opening all, or Port 1 to Port 2, closing Port 3, or Port 1 to Port 3, closing Port 2.

It will open or close any two Ports before opening or closing the other, and will open or close all three Ports at once.

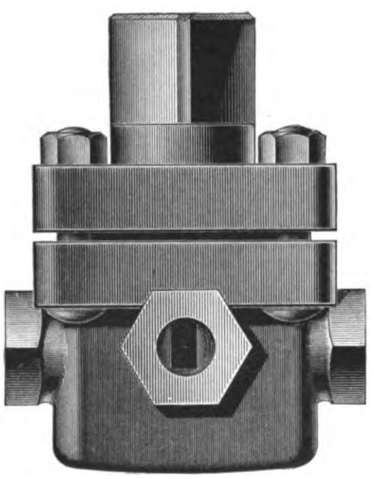


FIG. 151.

C PATTERN.

ASBESTOS PACKED THREE-WAY COCKS, SCREWED AND FLANGED.

SIZES.	1 in.	1¼ in.	1½ in.	2 in.	2½ in.	3 in.
Screwed,	....	....	....	....	....	....
Flanged,	....	....	....	....	....	....
Diameter of Flanges,	....	....	6 in.	7 in.	7 in.	7 in.

PRICES ON APPLICATION.

ASBESTOS PACKED IRON COCKS.

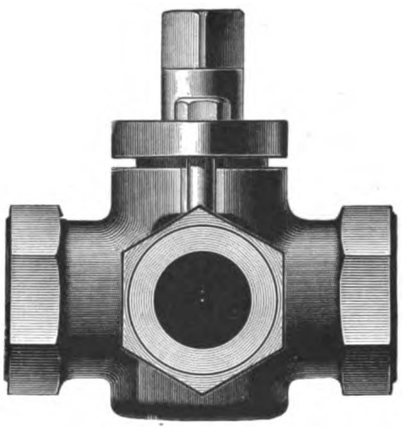


FIG. 152.

ASBESTOS PACKED THREE-WAY COCKS, SCREWED.

SPECIAL PATTERNS MADE TO ORDER. PRICES ON APPLICATION.

ASBESTOS PACKED IRON COCKS.

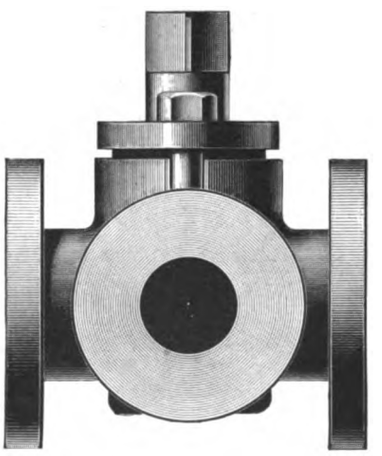


FIG. 153

ASBESTOS PACKED THREE-WAY COCKS, FLANGED.

SPECIAL PATTERNS MADE TO ORDER. PRICES ON APPLICATION.

BRASS AUTOMATIC WATER GAUGE VALVES,

FOR USE IN CONNECTION WITH THE REGULAR WATER GAUGE.

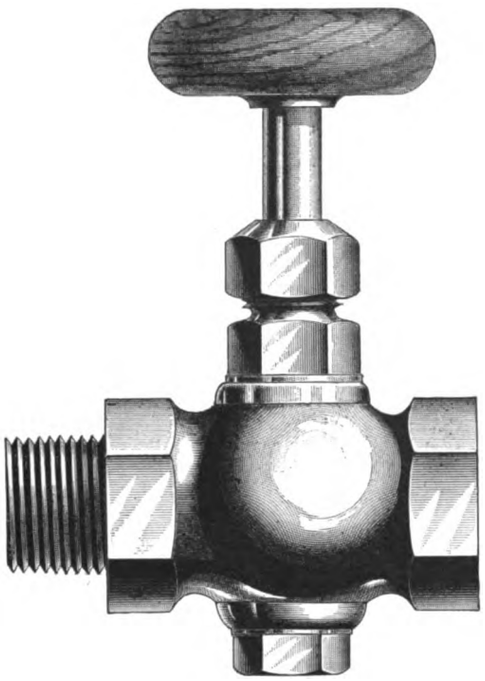


FIG. 154.

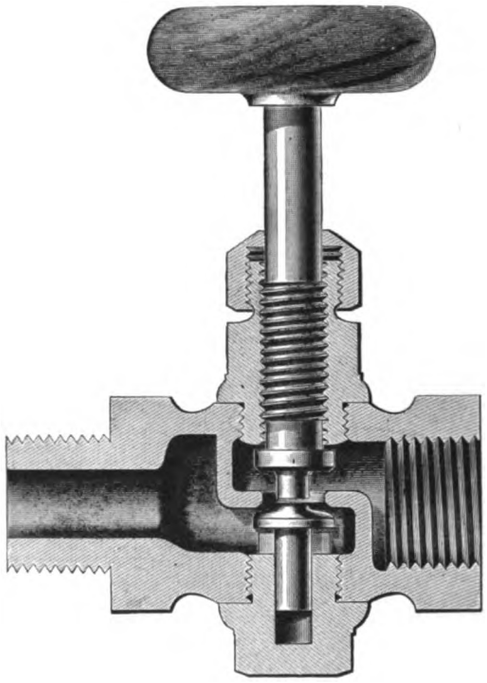


FIG. 155.

THE above sectional view of our new Automatic Water Gauge Valve cannot but convince the user of like appliances of its extreme simplicity. It is a most positive preventive against loss by the breaking of the glass. There are no ball valves to stick or strainers necessary which become clogged and stopped up. All the parts are easily reached and kept clean, and as it is, in truth, but a Combination Globe and Check Valve, the check seating in an opposite direction to the globe, it can readily be taken apart and reground. The above valve is intended for use between the boiler and regular brass water gauge. It has two operations, one wide open which releases the automatic valve and allows of its instant use; the other is closed, which is done after a new glass has been inserted, forcing the automatic valve from its seat and allowing the glass to fill. This valve will not close off by the turning of the wheel.

SIZES.	⅜ in.	½ in.	¾ in.
Brass, ...	$6.00 per set.	7.00 per set.	8.00 per set.
Nickel Plated, ...	6.50 per set.	7.50 per set.	8.50 per set.

BRASS AUTOMATIC WATER GAUGES.

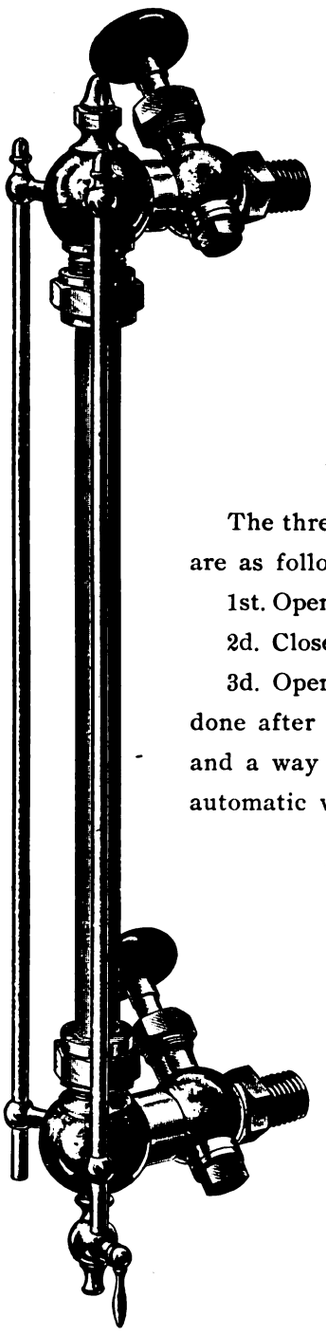


FIG. 156.

This Water Gauge is fitted with the same automatic valve attachment as is shown in Fig. 154. It is very compact and most positive in its working. As part of this Gauge and differing from that used in connection with the regular Brass Water Gauge, it has the advantage of closing by means of the outside or wood wheel valve.

The three operations of this Water Gauge are as follows:

1st. Open wide, automatic valve released.

2d. Closed, shut off completely.

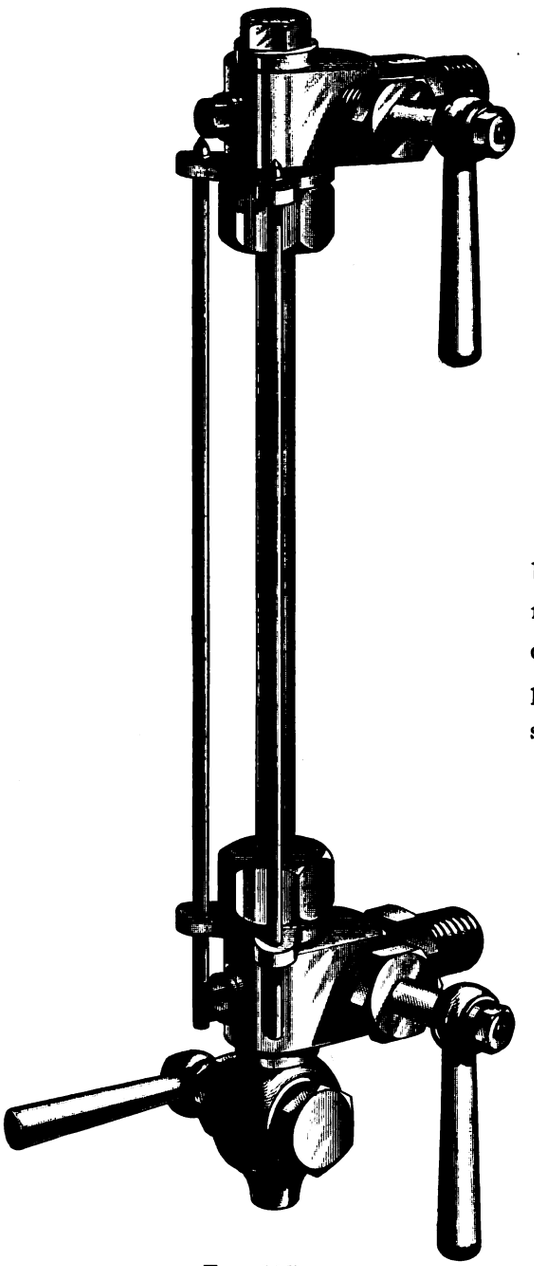
3d. Opened an eighth of a turn (which is done after a new glass has been inserted) and a way is opened without releasing the automatic valve.

SIZES.	⅜ in.	½ in.	¾ in.
Brass,	$11.00 each.	12.00 each.	16.00 each.
Nickel Plated,	12.00 "	13.00 "	17.00 "

The above prices do not include glasses, which are not furnished unless so ordered.

BRASS

ASBESTOS PACKED WATER GAUGES.



These Gauges are all fitted with an automatic attachment, which consists of a ball valve held in place in the bottom part, and a spray valve in the top part.

On the breaking of the glass, both of these valves are carried to their seats by the sudden outward pressure, thereby preventing the loss usual in such cases.

FIG. 157.

AUTOMATIC ATTACHMENT.

No. 1. ½ in. Boiler Connection, ⅝ in. Glass	No. 2. ¾ in. Boiler Connection, ⅝ in. Glass.	No. 3 ¾ in. Boiler Connection, ¾ in. Glass.	No. 4. 1 in. Boiler Connection, ¾ in. Glass.
$18.00	18.00	18.00	18.00

The above prices do not include glasses, which are not furnished unless so ordered.

ALL IRON
ASBESTOS PACKED AMMONIA GAUGES.

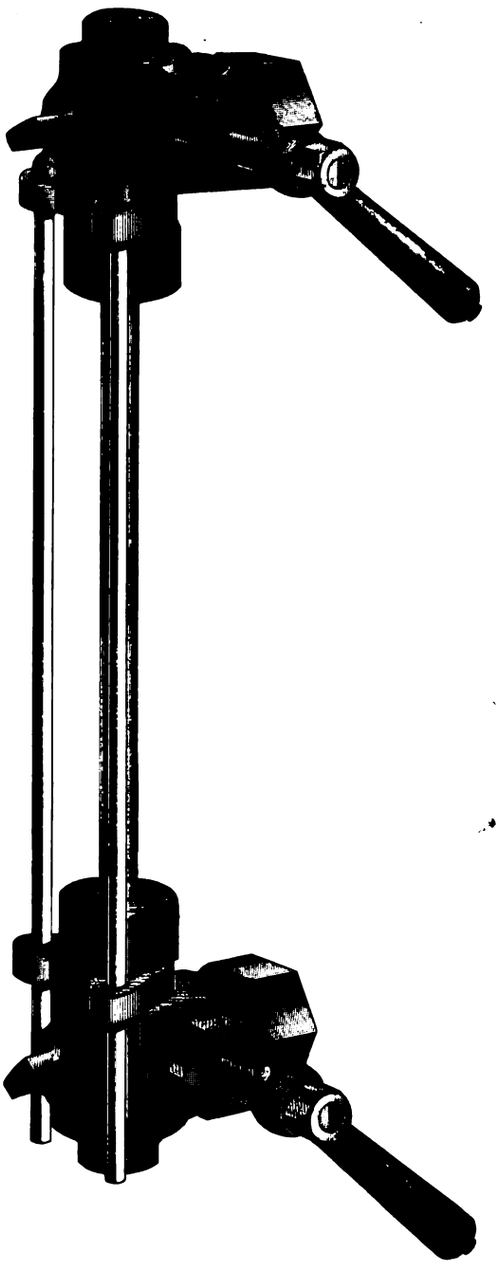


FIG. 158.

WITH AUTOMATIC ATTACHMENT, FEMALE THREADS.

No. 1. ½ in. Boiler Connection, ⅝ in. Glass.	No. 2. ¾ in. Boiler Connection, ⅝ in. Glass.	No. 3. ¾ in. Boiler Connection, ¾ in. Glass.	No. 4. 1 in. Boiler Connection, ¾ in. Glass.
$16.00	16.00	16.00	16.00

The above prices do not include glasses, which are not furnished unless so ordered.

PRATT'S

PATENT RETURN STEAM TRAP

—IS A—

COMPLETE SAFEGUARD AGAINST LOSS OF STEAM IN HEATING, DRYING, ETC.

THE amount to be saved varies with the circumstances of each case; therefore we cannot guarantee any special percentage, but can agree to save whatever is wasted by discharging the condensation.

We can cite cases where half the coal used in heating was saved by the use of this trap (this was an exceptional case), but in many cases the saving has shown a percentage as high as 33⅓ per cent., in others 25 per cent., and in others 10 per cent.

In cases where most of the steam is used in heating, the Trap can be made do all the feeding of the Boilers (if there is sufficient pressure of cold water), by introducing into the Trap a sufficient amount of cold water to make up the whole amount of water required.

All Traps put up according to our directions are guaranteed to work satisfactorily. Any steamfitter can put them up, as there are no adjustments to be made.

The Traps have been on the market about eight years, during which time a large number of them have been sold and found to give general satisfaction.

In heating by direct steam, there is a large amount of heat wasted, even when the condensation is run into a tank and pumped into Boilers, while allowing it to go to waste entirely, even through the best of traps, is a loss that no one who wishes to use steam with the utmost economy will allow.

In using the Return Steam Trap there is no outlet for the steam used in heating, &c., except into the Boiler from which it came; therefore there can be no loss of heat except by radiation from the heating surfaces. Condensation is returned to Boilers at a temperature due to the pressure at which the steam condenses.

With 75 pounds of steam in Boilers we have known it to be as high as 300°. There is no doubt as to the economy of returning under pressure, the facts being too well known to admit of a doubt.

PRATT'S PATENT RETURN STEAM TRAP.

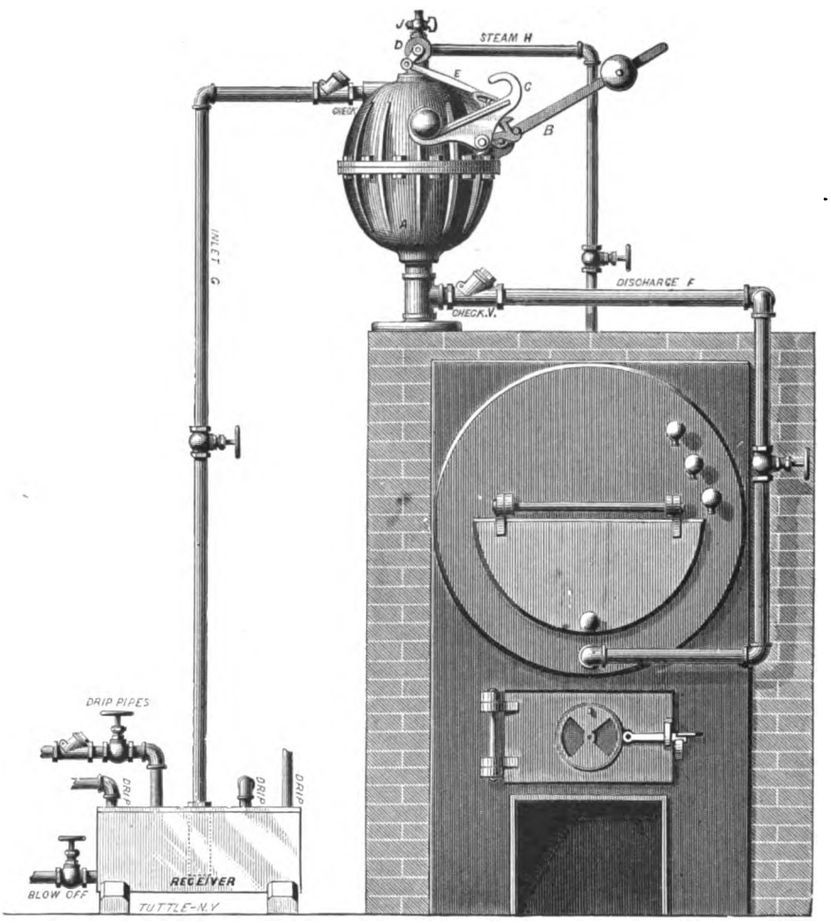


FIG. 159.

TRAP.	INLET G.	OUTLET F.	STEAM H.	WILL DRAIN 1 IN. PIPE.	WATER DELIVERY.	PRICE.
No. 1.	1 inch.	1¼ inch.	¾ inch.	4,000 to 5,000 ft.	200 gals. per hour.	$100.00
No. 2.	1¼ inch.	2 inch.	1 inch.	8,000 to 10,000 ft.	350 gals. per hour.	150.00
No. 3.	1½ inch.	2 inch.	1¼ inch.	15,000 to 20,000 ft.	550 gals. per hour.	200.00
No. 4.	2 inch.	2½ inch.	1½ inch.	30,000 to 40,000 ft.	800 gals. per hour.	300.00

Receivers Extra.—No. 1, $12.00; No. 2, $15.00; No. 3, $18.00. Check and Globe Valves Extra.

CONSTRUCTION AND POSITION OF THE TRAP.

A is the receiving vessel, inside of which is a water tight cast iron float, suspended on one end of a lever, the other end of which is fast to a spindle which goes through a stuffing box to the outside of *A*, and carries on its outer end the lever *B*, with weight which counterpoises half the weight of float. *C* is a rocking lever with a weight which rolls to either end, alternately, as the Feeder fills and is emptied of water, the rolling ball acting at exactly the same point every time, to open and close the steam valve *D*. *E* is a connecting rod between lever of valve *D* and the rocking lever *C*. *F* is the feed pipe to boilers. *H* is the pipe from the boilers direct to the steam valve *D*. This pipe must be taken direct from the dome of the boiler and not from any pipe or pipes from which steam is being used for other purposes. *J* is an air cock, to allow air to escape when first starting up.

THE HANCOCK INSPIRATOR.

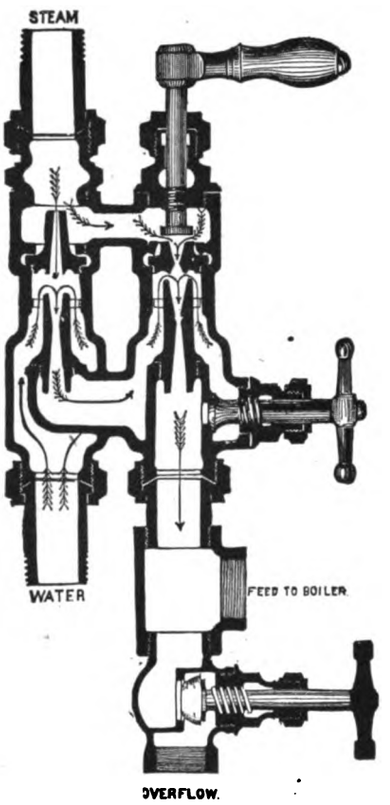


FIG. 160 (Sectional View).

The large number of Hancock Inspirators now in use testifies to its abilities as a most economical and trustworthy machine, and warrants us in claiming it the best and most reliable boiler feeder known. As all the parts are interchangeable, it is most easily repaired, simple in construction, readily understood, easily operated, and, as has been proven by many trials and tests, takes less steam in accomplishing results than any injector in the market. No adjustment for variation in pressure. Works equally well on a high or low lift. Takes water at 140° Fahr. on 3 or 4 feet lift with 45 pounds of steam or at 110° Fahr. on a 25 feet lift with 45 pounds of steam. 150,000 OF THESE MACHINES HAVE BEEN SOLD.

DIRECTIONS FOR CONNECTING AND OPERATING.

Connect as shown "Steam," "Water," "Feed." In making steam connection with the boiler, do not connect with other steam pipes, but take the steam direct by tapping the boiler. Place a globe valve in steam pipe just above the Inspirator for a starting valve, and a check valve in the feed pipe between the Inspirator and boiler. Blow out steam pipes before connecting. For a high lift or a long draft make the suction one size larger than the connections. Be sure that the suction connections are perfectly air tight. For a lift of 5 feet, about 15 pounds steam pressure is required: for 10 feet lift, about 20 pounds steam; for 15 feet, 25 pounds; for 20 feet, 35 pounds; for 25 feet, 45 pounds. Every machine is carefully tested before leaving the factory, and is warranted to work satisfactorily if the directions for connecting are strictly followed.

To start the Inspirator, see that the overflow valves marked 1 and 3 are open and the forcer valve marked 2 is closed. Give steam. After getting the water, close No. 1; open No. 2 one-quarter of a turn; close No. 3, and the Inspirator is at work. No adjustment is necessary for varying steam pressures, but the quantity and temperature of the water delivered can be varied by increasing or reducing the steam or water supply. The conditions in different places vary so widely that we cannot give any absolute rule for operating; but a competent engineer will soon learn how to regulate his steam and water supply to produce the best results in his case. When the Inspirator is under a head of water, we advise placing an ordinary globe valve in the suction pipe, to regulate the supply of water to the Inspirator. If this is not done, we recommend the use of a tank, fed by ball cock, the Inspirator to draw from tank. In all cases, when the Inspirator is not at work, both overflow valves, 1 and 3, should be kept open. To test the suction, stop the lower end of pipe, fill it with water, close both overflows and let on full head of steam; then examine pipe for leaks.

THE HANCOCK INSPIRATOR.

STATIONARY PATTERN.

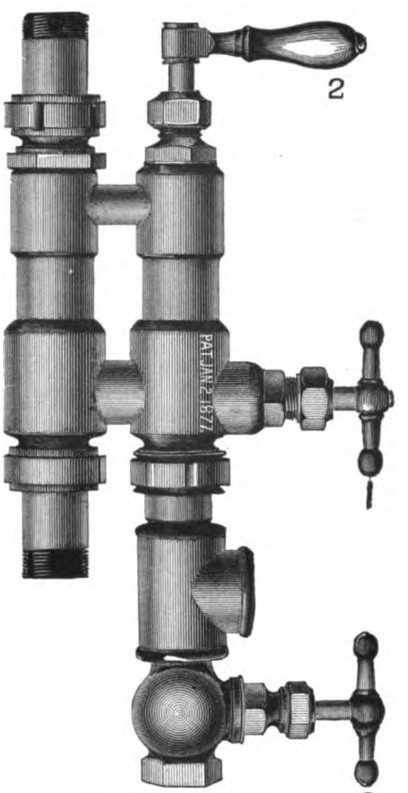


FIG. 161.

WHEN ORDERING AN INSPIRATOR PLEASE ANSWER THE FOLLOWING QUESTIONS: 1. What is the horse power of boiler or boilers? What is the quantity of water required per hour? 2. What is the range of steam pressure? 3. What is the temperature of supply? 4. What is the extreme lift or head, vertically or horizontally, from supply to Inspirator? 5. Is water used for other purposes than feeding boilers? 6. What is the number of boilers? 7. What type of boiler is used? 8. What are the dimensions of boilers?

PRICE LIST OF INSPIRATORS FOR STATIONARY BOILERS.

No. of Inspirator.	Suction and Feed Pipe.—Inches.	Steam Pipe.—Inches.	Gallons Per Hour, 60 Lbs. Pressure.	Horse Power.	Price.
7½	¾	¾	60	8	$16.00
8¼	¾	¾	90	12	18.00
10	¾	¾	120	16	20.00
12½	¾	¾	220	30	25.00
15	¾	¾	300	40	30.00
17½	1	¾	420	56	40.00
20	1	¾	540	72	45.00
22½	1¼	1	720	96	55.00
25	1¼	1	900	120	60.00
30	1½	1¼	1,260	168	75.00
35	1½	1¼	1,740	230	90.00
40	2	1½	2,230	298	110.00
45	2	1½	2,820	376	125.00
50	2½	2	3,480	464	150.00
55	2½	2	3,650	600	175.00

The capacity of these machines is estimated with a 4 feet lift and 60 pounds steam. With a greater lift the capacity will be proportionately reduced.

THE HANCOCK INSPIRATOR.

LOCOMOTIVE PATTERN.

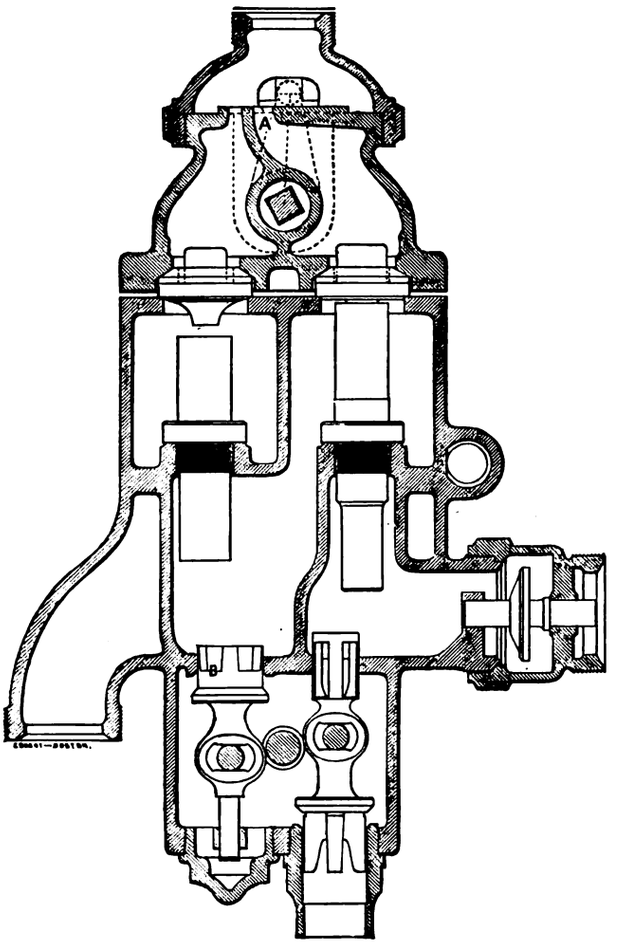


FIG. 162 (Sectional View).

This machine is designed especially for feeding locomotive boilers, and is entirely reliable for use *on the road*, as well as when the engine is at rest. It is operated by the use of *One Handle or Lever*.

The Company furnish a Lazy or Regulating Cock, upon which they hold Letters Patent, which is so constructed as to prevent the possibility of air entering the suction, if amply supplied with water from the hose.

The sizes required for locomotives with from 14 inch to 17 inch cylinders are of the same outside dimensions and same size connections. Their capacities are designated by numbers. We ask a trial. We claim nothing for the "HANCOCK" that we are not fully confident it will accomplish, and we are desirous that the machine should stand solely on its merits.

DIRECTIONS FOR SETTING VALVES ON LOCOMOTIVE INSPIRATORS.—See that Steam port at point A is open $\frac{1}{16}$, while overflow is just closed, as at B. This applies to No. 32½ Inspirator; larger sizes require a little more opening, and smaller ones a little less. The distance from Seat of Valve to line B, and from Seat of Valve to line C, should be preserved if Valves need grinding.

DIRECTIONS FOR CONNECTING AND OPERATING INSPIRATOR ON LOCOMOTIVES.— Place the Inspirator so that the *lower end* will be above the water in the tank. *Be sure that the Suction is Absolutely Tight.* Place the lazy cock in the same position as for a pump and operate in the same manner. A mark can be made on the quadrant at the point where it is closed as much as the Inspirator will bear, which can be determined after a few trials. To start the Inspirator, draw the lever back sufficiently to bring the water, say, *three or four inches*, then draw it back to the stop.

THE HANCOCK INSPIRATOR.

LOCOMOTIVE PATTERN.

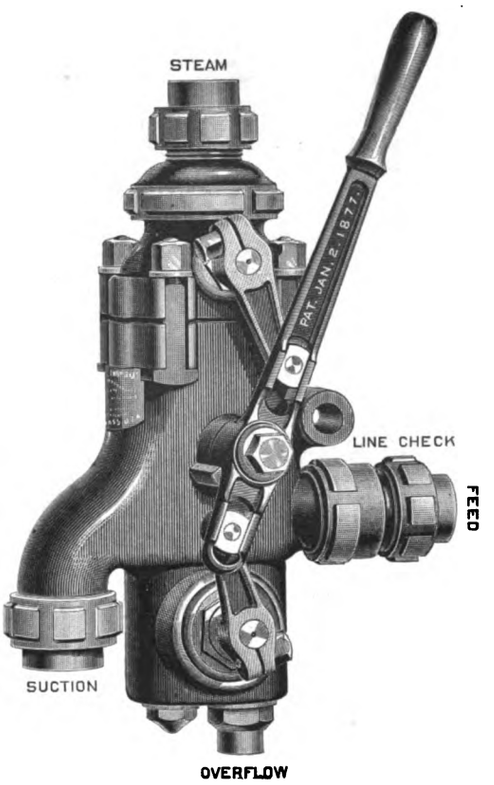


FIG. 163.

No. of Inspirator.	Size of Locomotive Cylinder.	Size of Connections. Steam.	Suction.	Feed.	Gallons per Hour, 60 Lbs. Pressure.	Horse Power. 25 Ft. Lift, 60 Lbs. Pressure.	10 Ft. Lift, 60 Lbs. Pressure.	Price.
10	10 in.	¾ in.	¾ in.	¾ in.	120	15	20	$30.00
12½	10 "	¾ "	¾ "	¾ "	220	20	25	32.50
15	12 "	¾ "	¾ "	¾ "	300	30	40	35.00
17½	12 "	¾ "	1 "	1 "	360	45	60	40.00
20	13 "	¾ "	1 "	1 "	540	70	80	50.00
22½	13 "	1¼ "	1½ "	1¼ "	700	90	100	65.00
25	14 "	1¼ "	1½ "	1¼ "	900	100	120	70.00
27½	14 "	1¼ "	1½ "	1¼ "	1,000	130	150	75.00
30	15 "	1¼ "	1½ "	1¼ "	1,260	160	190	85.00
32½	16 "	1¼ "	1½ "	1¼ "	1,400	190	220	90.00
35	16 "	1¼ "	1½ "	1½ "	1,740	230	260	100.00
37½	17 "	1¼ "	1½ "	1½ "	1,900	260	300	110.00
40	18 "	1¼ "	1½ "	1½ "	2,230	300	320	120.00
42½	18 "	1½ "	2 "	1½ "	2,500	320	350	140.00
45	20 "	1½ "	2 "	1½ "	2,820	350	400	150.00
47½	20 "	1½ "	2 "	1½ "	3,000	400	450	155.00
50	20 "	1½ "	2 "	1½ "	3,480	500	600	160.00

We furnish Steam or Starting Valves, Check Valves, and our Patent Lazy Cock for all sizes over No. 20, for—

Steam or Starting Valve,	$10.00
Check Valve,	10.00
Patent Lazy Cock,	15.00
Patent Lazy Cock, 2½ in.,	18.00

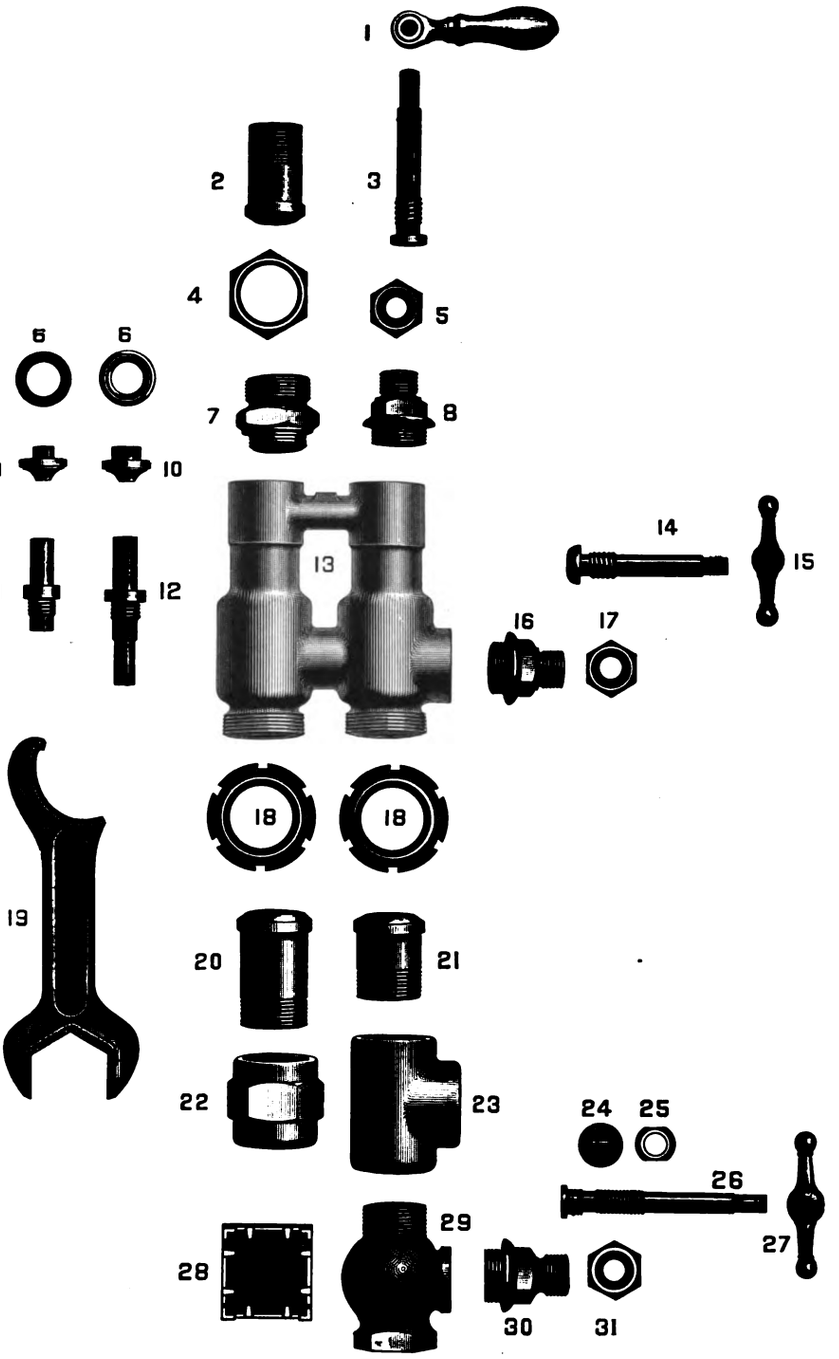
For all sizes below No. 20 and including No. 20, for—

Steam or Starting Valve,	$7.50
Check Valve,	7.50
Patent Lazy Cock,	10.00
Quarter turns,	3.00
Return bends,	3.00
Union Joints,	3.25

The Locomotive Inspirator has the same capacity as the corresponding number of stationary.

STATIONARY INSPIRATOR PARTS.

1 Shank Handle.
2 Steam Nipple.
3 Long Stem.
4 Steam Coupling.
5 Packing Nut.
6 and 6 Binding Rings.
7 Union.
8 Top Bonnet.
9 Lifter Steam Jet.
10 Forcer Steam Jet.
11 Lifter Tube.
12 Forcer Tube.
13 Barrel.
14 Short Stem.
15 Ball Handle.
16 Overflow Bonnet.
17 Packing Nut.
18 and 18 Suction and Feed Couplings.



19 Spanner Wrench
20 Suction Nipple.
21 Feed Nipple.
22 Suction Pipe Coupling.
23 Tee.
24 Overflow Valve Swivel.
25 Overflow Valve Swivel Nut.
26 Overflow Valve Stem.
27 Overflow Valve Handle.
28 Strainer.
29 Overflow Valve Body.
30 Overflow Valve Bonnet.
31 Overflow Valve Packing Nut.

FIG. 164.

PARTS ARE SHOWN AS NEAR AS POSSIBLE TO THEIR PLACE IN COMPLETE INSPIRATOR.

Nos. 1, 3, 5 and 8, together make Top Bonnet complete, or	No. 32
Nos. 14, 15, 16 and 17, together make Overflow Bonnet complete, or	No. 33
Nos. 24, 25, 26, 27, 29, 30 and 31, together make Overflow Valve complete, or	No. 34
Nos. 9, 10, 11 and 12, together make Set of Jets complete, or	No. 35
Nos. 18, 20 and 22, together make Suction Connection complete, or	No. 36
Nos. 18, 21, 23 and 34, together make Overflow complete, or	No. 37

LOCOMOTIVE INSPIRATOR PARTS.

40 Crank Pins.
41 Steam Coupling.
42 Steam Nipple.
43 Cap Bolts.
44 Crank Screws.
45 Cranks.
46 Handle.
47 Cap Step Nut.
48 Dome.
49 Cap Nut.
50 Packing Ring for Top Shaft.
51 Cap.
52 Top Shaft.
53 SlideValve Drivers
54 Slide Valve.
55 Spring for Top Shaft.
58 Handle Stop.
59 Handle Stop Screw
60 Body.
63 Feed Coupling.
64 Handle Stud.
66 Line Check Valve.
67 Line Check Body.
68 Feed Nipple.
69 Suction Quarter Turn. Furnished with size No. 20 and under.

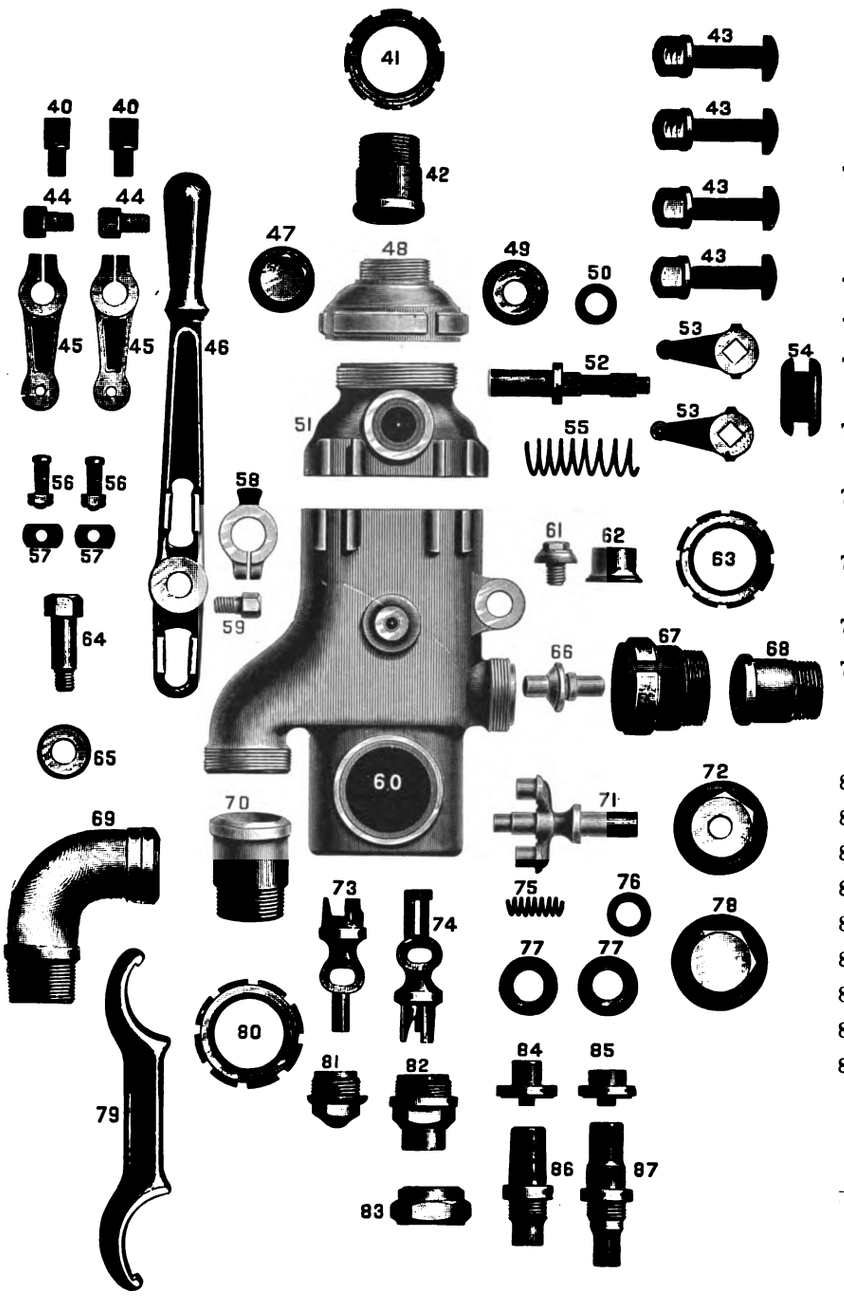


Fig. 165.

70 Suction Nipple. Furnished with size No. 22½ and over.
71 Bottom Shaft.
72 Overflow Bonnet.
73 Lifter Overflow Valve.
74 Forcer Overflow Valve.
75 Spring for Bottom Shaft.
76 Packing Ring for Bottom Shaft.
77 Binding Rings.
79 Spanner Wrench. Furnished with size No. 17½ and over.
80 Suction Coupling.
81 Overflow Nut.
82 Overflow Nozzle.
83 Drip Nut.
84 Lifter Steam Jet.
85 Forcer Steam Jet.
86 Lifter Tube.
87 Forcer Tube.
88 Set of Jets complete, made up from Nos. 84, 85, 86 and 87.

NOTE.— Nos. 42, 68 and 69 are furnished to connect with iron pipe, with size No. 20 and under, unless otherwise ordered.

Nos. 42, 68 and 70 are furnished to braze to brass or copper pipe, with size No. 22½ and over, unless otherwise ordered.

HANCOCK INSPIRATORS.

TRACTION PATTERN.

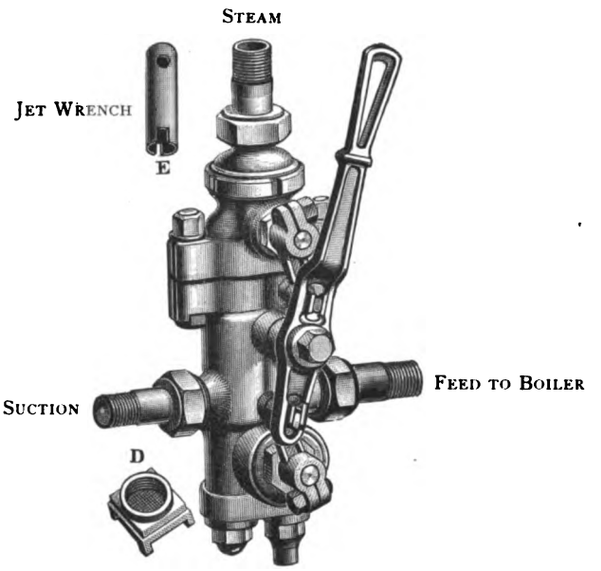


FIG. 166.

NO. OF INSPIRATOR.	SIZE OF CONNECTIONS.	GALLONS PER HOUR AT 60 LBS. PRESSURE.	HORSE POWER.	PRICE.
10	¾ in.	120	15	$30.00
12½	¾ "	201	20	32.50
15	¾ "	282	25	35.00

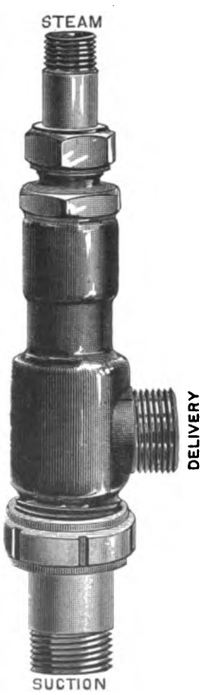


FIG. 167.

EJECTORS OR LIFTERS.

FOR RAISING WATER OR HOT LIQUIDS.

The capacity of these machines is estimated with a 4 ft. lift and 60 pounds steam. With a greater lift the capacity will be proportionately reduced. All sizes will lift water 25 feet, and raise it above the instrument from 10 to 40 feet, according to the steam pressure.

NO.	SUCTION AND FEED.	STEAM.	GALLONS PER HOUR.	PRICE.	NO.	SUCTION AND FEED.	STEAM.	GALLONS PER HOUR.	PRICE.
10	½ in.	⅜ in.	120	$7.00	55	2½ in.	1¼ in.	3,600	$50.00
15	¾ "	⅜ "	300	10.00	60	3 "	1½ "	4,000	55.00
20	1 "	½ "	540	15.00	65	3 "	1½ "	4,520	60.00
25	1¼ "	½ "	900	20.00	70	3½ "	2 "	5,200	65.00
30	1½ "	¾ "	1,260	25.00	75	3½ "	2 "	6,000	70.00
35	1½ "	¾ "	1,743	30.00	100	4 "	2 "	10,620	75.00
40	2 "	1 "	2,230	35.00	110	4 "	2 "	12,900	80.00
45	2 "	1 "	2,876	40.00	120	6 "	3 "	15,360	85.00
50	2½ "	1¼ "	3,480	45.00					

Larger sizes, and Ejectors for handling hot liquids, furnished to order.

VULCABESTON.

THIS is a new material which, as its name would indicate, is composed of the mineral "Asbestos" and a small proportion of vulcanizing materials. By varying the proportion of the ingredients we obtain a substance capable of being rendered extremely hard, very soft, or very pliable, which permits of its being put to an endless variety of uses. The most important property of Vulcabeston, and that which makes it more than valuable, is its permanent resistance to the action of dry heat. By rendering it acid and water proof we make it still more valuable, and as such do not hesitate to claim it as the best and most durable packing for all kinds of joints on the market to-day. It has another property which commends it to notice and that is as a non-conductor of electricity. When made for this purpose it has the advantage over similar substances in holding its shape, as moisture or heat has little or no effect on it, neither expanding nor contracting it. It can be rolled into sheets, pressed into moulds of any desired shape. At present we are making two qualities of the sheet packing, namely, Steam and Electrical, of which we carry a large stock. The Rope Packing, for convenience in handling, is put on spools, and can be had in all sizes.

VULCABESTON STEAM SHEET PACKING

Can be furnished in sheets 36″ x 36″ or rolls and will be found a most durable and economical packing on Steam, Gas, Air, Water, Ammonia, Hot Oils, &c.

VULCABESTON ROPE PACKING.

We are making two styles of this packing, namely, Round from $\frac{1}{16}$″ to 2″, and Square from $\frac{1}{16}$″ to $\frac{1}{2}$″. This must not be confounded with the old style Asbestos rope, as the addition of the vulcanizing materials permits of its being placed where the other could not. A joint made with this packing can be broken a number of times without a renewal of the packing, as wet steam or hot water will not destroy it or wash it away, as in the case of other fibre packings.

VULCABESTON ELECTRICAL SHEET PACKING

Can be furnished in sheets 36″ x 36″.

THE FOLLOWING ARE NOW IN USE:

Moulded Union Rings,
Moulded Faucet Washers.
Moulded Manhole Gaskets,
Moulded Handhole Gaskets,
Moulded Carriage Axle Washers,
Moulded Railway Dust Guards,
Moulded Pump Valves,
Moulded Expansion Joint Washers,
Moulded Fire and Acid Proof Tubing,
Moulded Piston Rod Packing,
Moulded Fire Proof Shoes,
Moulded Fire Proof Heels and Soles,
Insulating Parts for Dynamos,
Insulating Parts for Armatures,
Insulating Parts for Switches,
Insulating Parts for Arc Lights,
Insulating Parts for Incandescent Lights,
Insulating Parts for Motors,
Insulating Parts for Chandeliers,
Insulating Rings and Washers,
Battery Cells,
Armature Sleeves.

VULCABESTON.

WICK PACKING.

1/16 in. on 1/8, 1, 5 and 10 lb. spools ..... $1.50 per pound

ROPE PACKING.

1/8 in.—on 1/8 lb. spools—1 lb.	1/8 in. Packing contains	128	ft.
3/16 in. on 1 lb. spools 1 lb.	3/16 in. Packing contains	50	ft.
1/4 in. on 1 lb. spools 1 lb.	1/4 in. Packing contains	25	ft.
5/16 in. on 1 lb. spools 1 lb.	5/16 in. Packing contains	16	ft.
1/2 in. on 5 lb. spools 1 lb.	1/2 in. Packing contains	9	ft.
5/8 in. on 5 lb. spools 1 lb.	5/8 in. Packing contains	8	ft.
3/4 in. on 5 lb. spools 1 lb.	3/4 in. Packing contains	6 1/2	ft.
7/8 in. on 10 lb. spools 1 lb.	7/8 in. Packing contains	4	ft.
1 in. on 10 lb. spools 1 lb. 1	in. Packing contains	3	ft.
1 1/4 in. on 10 lb. spools 1 lb.	1 1/4 in. Packing contains	2 1/4	ft.
1 1/2 in. on 25 lb. spools 1 lb.	1 1/2 in. Packing contains	1 5/8	ft.
2 in. on 25 lb. spools 1 lb. 2	in. Packing contains	1	ft.

$1.25 per pound

MOULDED UNION WASHERS.

Sizes. In.	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3
Per 100, 1/8 in....	$2.00	2.25	2.50	2.75	3.25	4.00	5.00	5.50	8.00	10.00
Per 100, 1/16 in....	1.50	1.75	2.00	2.25	2.75	3.25	3.75	4.25	6.75	8.00

MOULDED FAUCET WASHERS.

Per 100, 3/8 in., 1/2 in., 5/8 in., 3/4 in., ... $2.00 / 2.50

MOULDED PACKING RINGS, MANHOLE AND HANDHOLE GASKETS.

Round or Square. Less than 3/4 ounce, prices on application.

3/4 ounce and less than 3 ounces ..... per pound, $2.50
3 ounces and more ..... " 2.00

These prices include all plain rings or gaskets after moulds, which are extra, have been furnished. Odd styles and shapes to order. Prices on application.

PRESSED ROPE HANDHOLE AND MANHOLE GASKETS.

Less than 2 ounces in weight each ..... per pound, $3.50
2 ounces and less than 6 ounces each ..... " 2.50
6 ounces and more each ..... " 2.00

PRESSED ROPE PISTON ROD RINGS.

Concave or Convex. Less than 3/4 inch inside diameter, prices on application.

3/4 inch inside diameter and larger ..... per pound, $2.00

SHEET PACKING STEAM, Etc.

1/16 inch in thickness and upward, in sheets 36x36 inches ..... per pound, $1.00
1/32 inch and less than 1/16 inch in thickness ..... " 1.25

FOR ELECTRICAL PURPOSES.

Hard, in Sheets 36x36 Ins.

1/16 inch in thickness and upward ..... per pound, $1.25
1/32 inch and less than 1/16 inch in thickness ..... " 1.50

Th... years
past an... many
cases wl... of all
foreign ... joints,
vulcaniz... *Acid*,
Hot Syru...

1/8 in., 3/16 in., 1/4 in. } ... feet.
3/8 in., 1/2 in., 5/8 in. } 5 pound Spools. } $1.00 per pound. ... feet.
3/4 in., 7/8 in., 1 in. } 10 pound Spools. ... feet.
1 1/4 in., 1 1/2 in., 2 in. } 25 pound Spools. ... feet.

... pound of ... inch Packing ... feet.
1 pound of 5/8 inch Packing contains 8 feet.
1 pound of 3/4 inch Packing contains 6 1/2 feet.
1 pound of 7/8 inch Packing contains 4 feet.
1 pound of 1 inch Packing contains 3 feet.
1 pound of 1 1/4 inch Packing contains 2 1/4 feet.
1 pound of 1 1/2 inch Packing contains 1 5/8 feet.
1 pound of 2 inch Packing contains 1 foot.

25, 50, 75 and 100 pound Spools to order.

VULCABESTON WICK.

1/16 inch diameter.

In Balls, 1/2, 1 and 5 pounds, . per pound, $1.25 | In Spools, 5 and 10 pounds, . per pound, $1.25

The above has been acknowledged the best Valve Stem Packing known.

VULCABESTON SHEET PACKING,

FOR STEAM, GAS, AIR, WATER, AMMONIA, ETC.

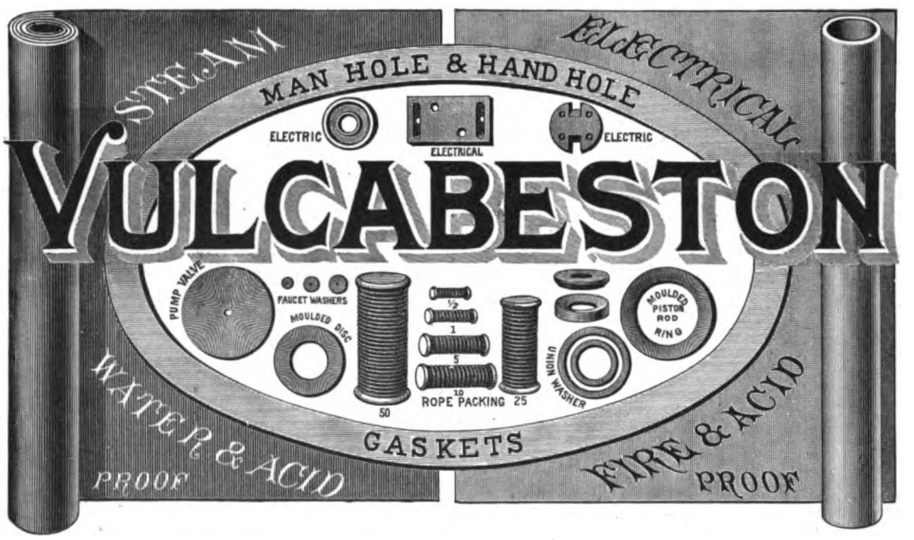
In Sheets 36 × 36 in., or Rolls.

HARD, MEDIUM, SOFT OR EXTRA FLEXIBLE.

$\frac{1}{16}$ inch in thickness and upward, Hard, Medium, Soft, Extra Flexible,	per pound,	$1.00
$\frac{1}{32}$ inch and less than $\frac{1}{16}$ inch in thickness, Hard, Medium, Soft, Extra Flexible,	per pound,	1.25

Extra Flexible furnished unless otherwise ordered.

In offering this Packing to Engineers and the Trade we need hardly mention its merits or speak of its qualities, as both are well-known materials. The Mineral Asbestos, which forms the base of this composition, due to its immunity from fire or heat, has been used very extensively, as also India Rubber, whose yielding and tenacious qualities place it at the head of the list of Packings, as a most valuable aid in making tight connections. Both of these materials have been independently used but never combined, and the advantages can be readily seen in joining together the two most widely known and recognized standard Packings.



VULCABESTON,

MOULDED, MANHOLE OR HANDHOLE GASKETS.

⅛ inch in thickness, Round or Square, Soft or Medium, . . . Per pound, $

1/16 inch and less than ⅛ inch in thickness, Round or Square, Soft or Medium, . Per pound,

For Prices see Special Lists.

MOULDED RINGS OR WASHERS.

⅛ inch in thickness and upward, 2½ inches outside diameter and larger, Round or Square, Hard, Medium, Soft, or Extra Flexible, ... Per pound, $

Less than ⅛ inch in thickness, less than 2½ inches outside diameter, Round or Square, Hard, Medium, Soft, or Extra Flexible, ... Per pound,

On all orders for Ten Pounds or more, No Charge will be made for Moulds.

For Prices see Special Lists.

MOULDED UNION WASHERS.

¼ inch to 3 inches.

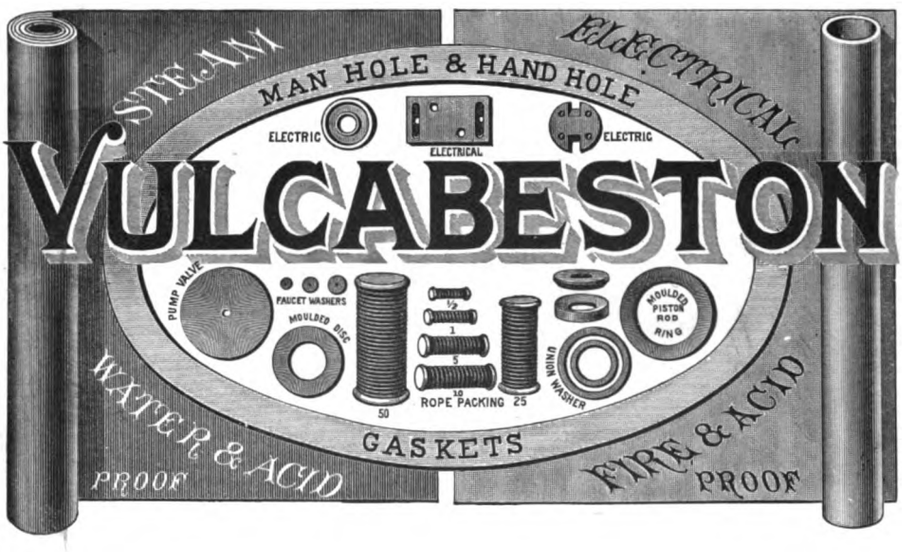
Price per 100, ... $

For Prices see Special Lists.

MOULDED FAUCET WASHERS.

All Sizes.

For Prices see Special Lists.



MOULDED PISTON ROD PACKINGS.

FOR OIL, AMMONIA, ALKALIES, CAUSTIC SODA, ETC.

All Sizes to Order. For Prices see Special Lists. On all Orders for 10 Pounds or more No Charge will be made for Moulds.

MOULDED PUMP VALVES.

FOR OIL, AMMONIA, ALKALIES, CAUSTIC SODA, ETC.

All Sizes to Order. For Prices see Special Lists.

MOULDED CARRIAGE AXLE WASHERS.

All Sizes to Order. For Prices see Special Lists.

VULCABESTON SHOES.

FOR USE IN SMELTING FURNACES, ACID AND CHEMICAL WORKS.

All Sizes to Order. For Prices see Special Lists.

VULCABESTON HEELS AND SOLES.

FOR USE IN SMELTING FURNACES, ACID AND CHEMICAL WORKS, ETC.

For Prices see Special Lists.

VULCABESTON SHEET PACKING,

FOR ELECTRICAL PURPOSES.

In Sheets 36 x 36 inches.

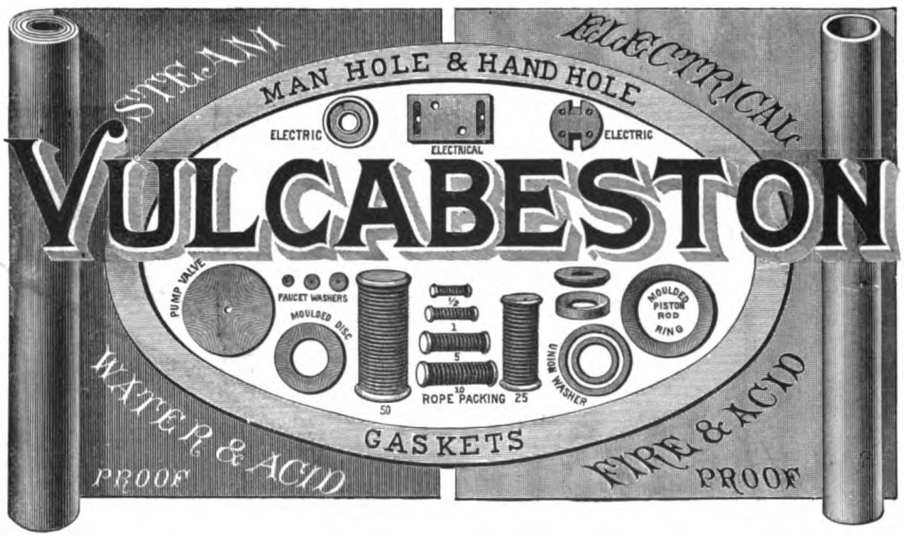
Larger sizes to order. Acid, Fire and Water Proof.

$\frac{1}{16}$ inch in thickness and larger, Hard, ...	Per pound,	$1.25
$\frac{1}{32}$ inch in thickness and less, Hard, ...	"	1.50

This material having been found to be a perfect non-conductor of electricity, besides being fire, acid and water proof, has been very extensively used by many of the largest Electrical Manufacturing and Electric Lighting Companies, as also many others interested in this line of work. This material can be moulded into any desired shape or form, thereby avoiding the drilling, tapping and turning necessary in most of the materials now in use. The following are a few of the many uses this material has been put to:

Vulcabeston Insulating Rings and Washers.
Vulcabeston Storage and Battery Cells.
Vulcabeston Insulating Parts for Dynamos.
Vulcabeston Insulating Parts for Armatures.
Vulcabeston Insulating Parts for Switches.
Vulcabeston Insulating Parts for Electric Motors.
Vulcabeston Insulating Parts for Arc Lamps.
Vulcabeston Insulating Parts for Incandescent Lamps.
Vulcabeston Insulating Parts for Cut Out Boxes.
Vulcabeston Insulating Parts for Electric Chandeliers.
Vulcabeston Insulating Tubing.

PRICES ON APPLICATION. SEE SPECIAL LISTS.



VULCABESTON

BATTERY AND ACCUMULATOR CELLS,

FOR ELECTRICAL PURPOSES.

For Prices see Special Lists.

We are prepared to quote prices and furnish any desired shape or style of Cell for Electrical purposes.

VULCABESTON ACID TANKS.

All Sizes to Order. Prices on Application.

VULCABESTON ELECTRIC TUBING.

All Sizes to Order. For Prices see Special Lists.

STEAM SPECIALTIES.

BRASS ASBESTOS DISC GLOBE AND ANGLE VALVES.
BRASS ASBESTOS DISC RADIATOR VALVES.
BRASS ASBESTOS DISC SAFETY VALVES.
BRASS ASBESTOS DISC HOSE VALVES.
BRASS SWINGING CHECK VALVES.
BRASS LOCOMOTIVE CHECK VALVES.
BRASS BACK PRESSURE VALVES.
BRASS SWINGING STOP VALVES.
BRASS SWINGING LOCK CHECK VALVES.
BRASS COCKS, ASBESTOS PACKED.
BRASS COCKS, ASBESTOS PACKED, FOR HOSE.
BRASS COCKS, ASBESTOS PACKED, FOR LOCOMOTIVE BLOW-OFFS.
BRASS GAUGE COCKS, ASBESTOS PACKED.

BRASS GAUGE COCKS, ASBESTOS DISC.
BRASS AUTOMATIC WATER GAUGES.
BRASS, ASBESTOS PACKED, WATER GAUGES.
DUPLEX GAUGE COCKS.

IRON BODY ASBESTOS DISC GLOBE AND ANGLE VALVES.
IRON BODY ASBESTOS DISC CROSS VALVES.
IRON BODY ASBESTOS DISC SAFETY VALVES.
IRON BODY SWINGING CHECK VALVES.

IRON BODY SWINGING BACK PRESSURE VALVES.
IRON BODY SWINGING STOP VALVES.
IRON BODY SWINGING LOCK CHECK VALVES.
IRON BODY SWINGING AMMONIA CHECK VALVES.

IRON COCKS, ASBESTOS PACKED, SCREWED AND FLANGED.
IRON COCKS, ASBESTOS PACKED, FOR HOSE.
IRON COCKS, ASBESTOS PACKED, FOR SUPERHEATED STEAM.
IRON COCKS, ASBESTOS PACKED, FOR AMMONIA.
IRON COCKS, ASBESTOS PACKED, WITH STOP AND WASTE.

IRON COCKS, ASBESTOS PACKED, THREE-WAY.
IRON COCKS, ASBESTOS PACKED, SPECIAL PATTERNS.
IRON WATER GAUGES, ASBESTOS PACKED, FOR AMMONIA.

PRATT'S PATENT RETURN STEAM TRAP.
HANCOCK INSPIRATORS.
HANCOCK EJECTORS.
VULCANIZED ASBESTOS ROPE PACKING.
VULCABESTON SHEET PACKING.
VULCABESTON SHEET PACKING, FOR ELECTRICAL USES.

FAIRBANKS & CO.

STANDARD SCALES.

The Best Scales for All Purposes.

WAREHOUSES:

FAIRBANKS & CO., 311 Broadway, . . . NEW YORK.
FAIRBANKS & CO., 19 Light Street, . . BALTIMORE, MD.
FAIRBANKS & CO., 53 Camp Street, . . NEW ORLEANS, LA.
FAIRBANKS & CO., 216 Main Street, . . BUFFALO, N. Y.
FAIRBANKS & CO., 382 Broadway, . . . ALBANY, N. Y.
FAIRBANKS & CO., 701 & 703 Arch Street, . PHILADELPHIA, PA.
FAIRBANKS & CO., 302 Wood Street, . . . PITTSBURGH, PA.
FAIRBANKS & CO., 16 Great Eastern Street, . LONDON, ENGLAND.
FAIRBANKS & CO., 419 & 421 St. Paul Street, . . MONTREAL.
FAIRBANKS & CO., 302 & 304 Washington Ave., . ST. LOUIS, MO.
FAIRBANKS & CO., 26 S. Meridian Street, . INDIANAPOLIS, IND.
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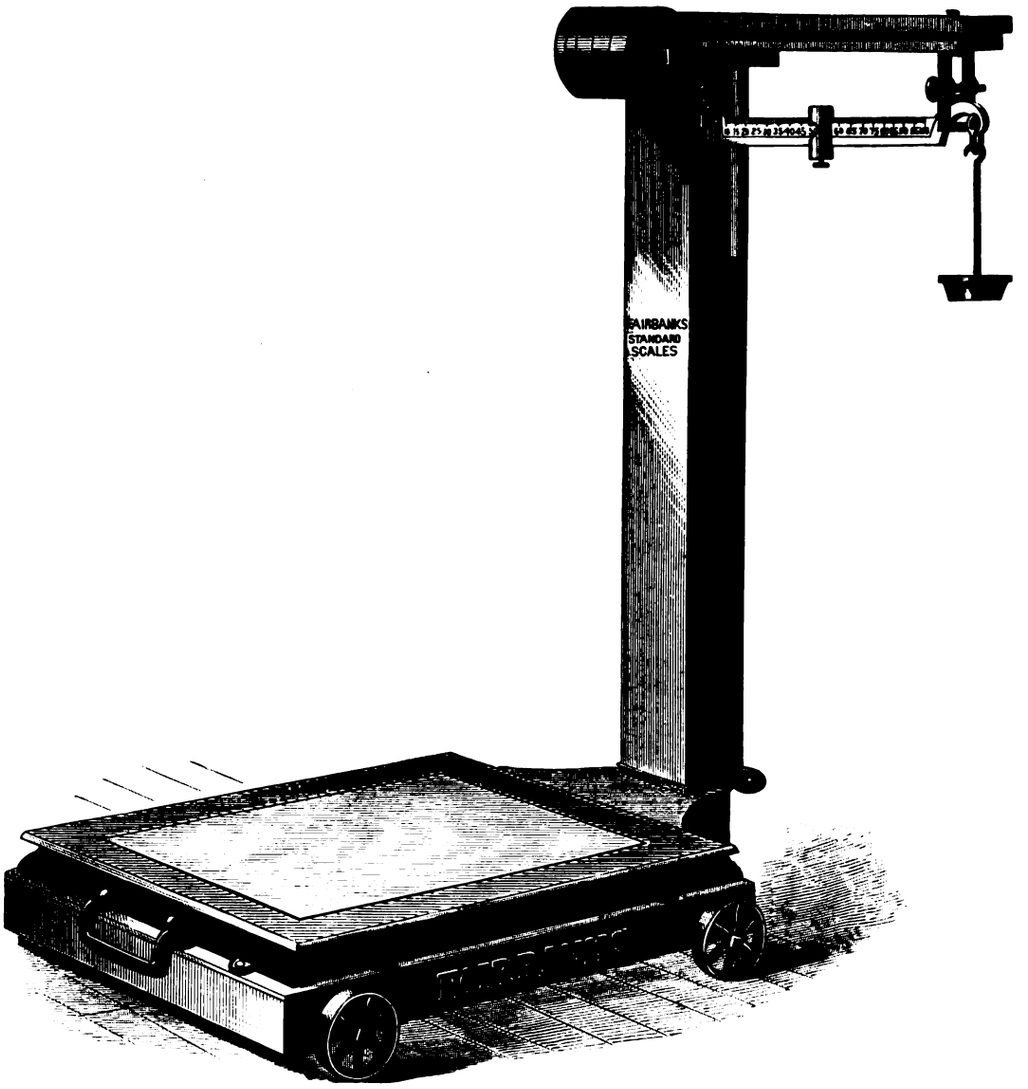
FAIRBANKS, MORSE & CO., 107 Water Street, . CLEVELAND, O.
FAIRBANKS, MORSE & CO., 4th & Main Streets, . LOUISVILLE, KY.
FAIRBANKS, MORSE & CO., 371 & 373 Sibley Street, ST. PAUL, MINN.
FAIRBANKS, MORSE & CO., 220 Nicollet Street, . MINNEAPOLIS, MINN.
FAIRBANKS & HUTCHINSON, 517 & 519 Market St., SAN FRANCISCO, CAL.

FAIRBANKS' PORTABLE SCALE,

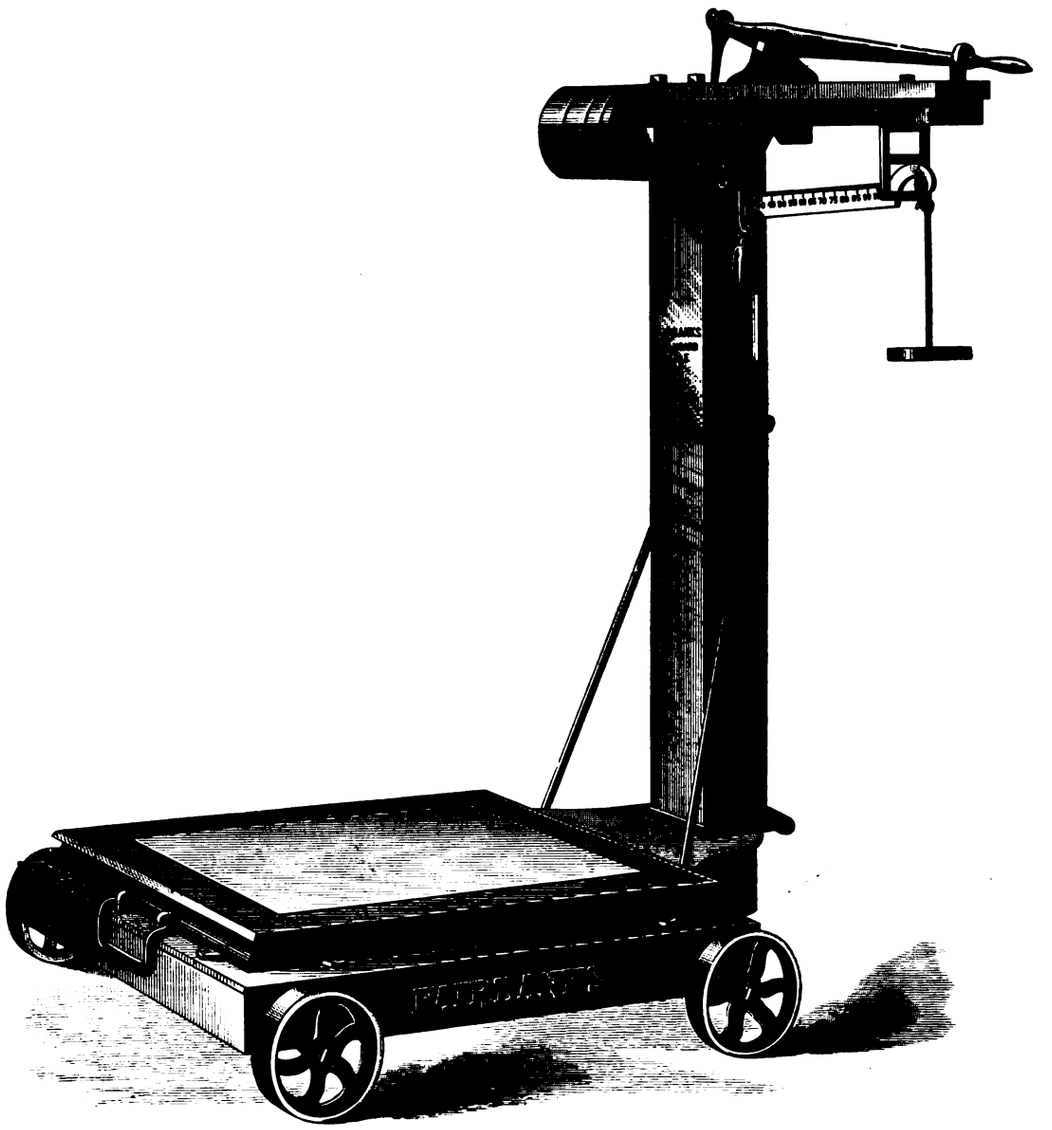
WITH WHEELS.



No. 1116.—Capacity,	2,500	pounds ;	Platform,	26 × 34	inches,	.	.	.	.	Price,	$85.00
No. 1118.—Capacity,	2,000	pounds ;	Platform,	25 × 33	inches,	.	.	.	.	"	75.00
No. 1120.—Capacity,	1,500	pounds ;	Platform,	21 × 28	inches,	.	.	.	.	"	56.00
No. 1122.—Capacity,	1,200	pounds ;	Platform,	20 × 28	inches,	.	.	.	.	"	49.00
No. 1124.—Capacity,	1,000	pounds ;	Platform,	17 × 26	inches,	.	.	.	.	"	43.00
No. 1126.—Capacity,	800	pounds ;	Platform,	17 × 26	inches,	.	.	.	.	"	38.00
No. 1128.—Capacity,	600	pounds ;	Platform,	16 × 25	inches,	.	.	.	.	"	33.00
No. 1130.—Capacity,	400	pounds ;	Platform,	15 × 21	inches,	.	.	.	.	"	26.00

FAIRBANKS' PORTABLE SCALE,

WITH WHEELS AND DROP LEVER.



No. 1166.—Capacity,	2,500 pounds ;	Platform, 26 × 34 inches,	Price,	$94.00
No. 1168.—Capacity,	2,000 pounds ;	Platform, 25 × 33 inches,	"	82.00
No. 1170.—Capacity,	1,500 pounds ;	Platform, 21 × 28 inches,	"	70.00
No. 1172.—Capacity,	1,200 pounds ;	Platform, 20 × 28 inches,	"	59.00
No. 1174.—Capacity,	1,000 pounds ;	Platform, 17 × 26 inches,	"	51.00
No. 1176.—Capacity,	800 pounds ;	Platform, 17 × 26 inches,	"	46.00
No. 1178.—Capacity,	600 pounds ;	Platform, 16 × 25 inches,	"	41.00
No. 1180.—Capacity,	400 pounds ;	Platform, 15 × 21 inches,	"	34.00

FAIRBANKS'

ROLLING MILL OR IRON SCALE,

WITH RUBBER SPRING PLATFORM.

CAPACITY, FROM 2,500 POUNDS TO 12,000 POUNDS.

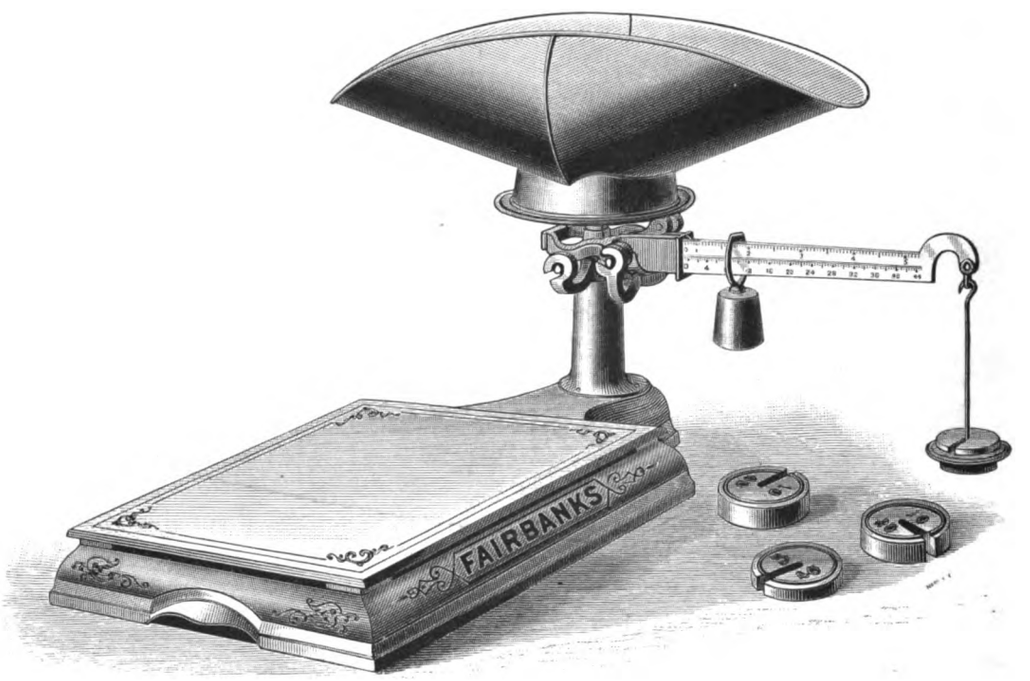
FAIRBANKS' WHEELBARROW SCALE.

No. 1382.—Capacity, 1,000 pounds; Platform, 30 × 42 inches, ... Price, $70.00

No. 1384.—Capacity, 1,000 pounds; Platform, 30 × 42 inches, with Wheels, . . " 75.00

FAIRBANKS' UNION OR FAMILY SCALE.

WITH TWO PLATFORMS.



No. 508.—Capacity, ½ oz. to 240 lbs.; Platform, 10½ × 14 inches, with Tin Scoop, . . Price, $14.50

No. 510.—Capacity, ½ oz. to 240 lbs.; Platform, 10½ × 14 inches, with Brass Scoop, . . " 15.50

No. 512.—Capacity, ½ oz. to 240 lbs.; Platform, 10½ × 14 inches, with Double Beam, Tin Scoop, " 15.50

No. 514.—Capacity, ½ oz. to 240 lbs.; Platform, 10½ × 14 inches, with Double Beam, Brass Scoop, " 16.50

IMPORTANT IMPROVEMENT IN SCALES

(PATENTED),

FOR WEIGHING GRAIN OR OTHER MERCHANDISE.

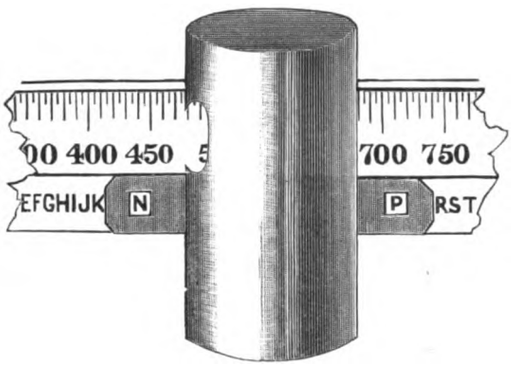


ILLUSTRATION OF BEAM AND POISE.

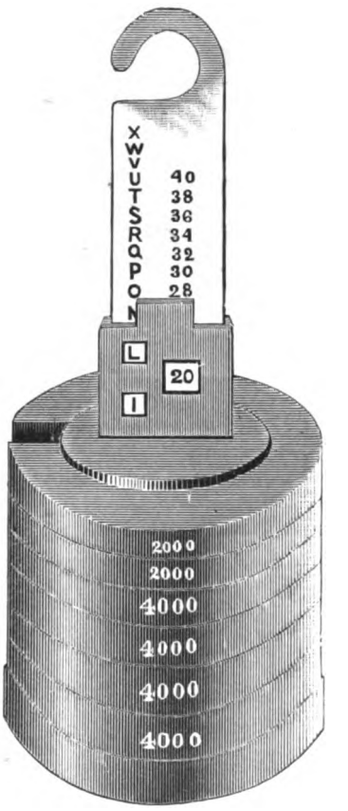


ILLUSTRATION OF COUNTERPOISE AND WEIGHTS.

As shown by accompanying illustration, the improvement consists of a series of letters stamped on the beam, in a line parallel with the figures. A small plate, with sight holes in it, is attached to the counterpoise, for holding the weights (at the end of the beam), which must be raised before placing the weights on the counterpoise. When it rests upon the weights it will show the figures and letters which indicate how many weights are on the counterpoise. A small plate is also attached to the sliding poise on the beam, with sight holes at either end, which disclose a particular combination of letters, which show the location of the poise when the figures are taken. For every possible weight there is a different combination of letters, which, being entered in the weighman's tally book, indicate the exact number of weights on the counterpoise, and the exact location of the poise on the beam when the figures were taken. Weights may be represented by letters as well as by figures, so that the entry, as shown in the illustration, 20,480, is the only number which would show the same combination of letters, L, I, N, P.

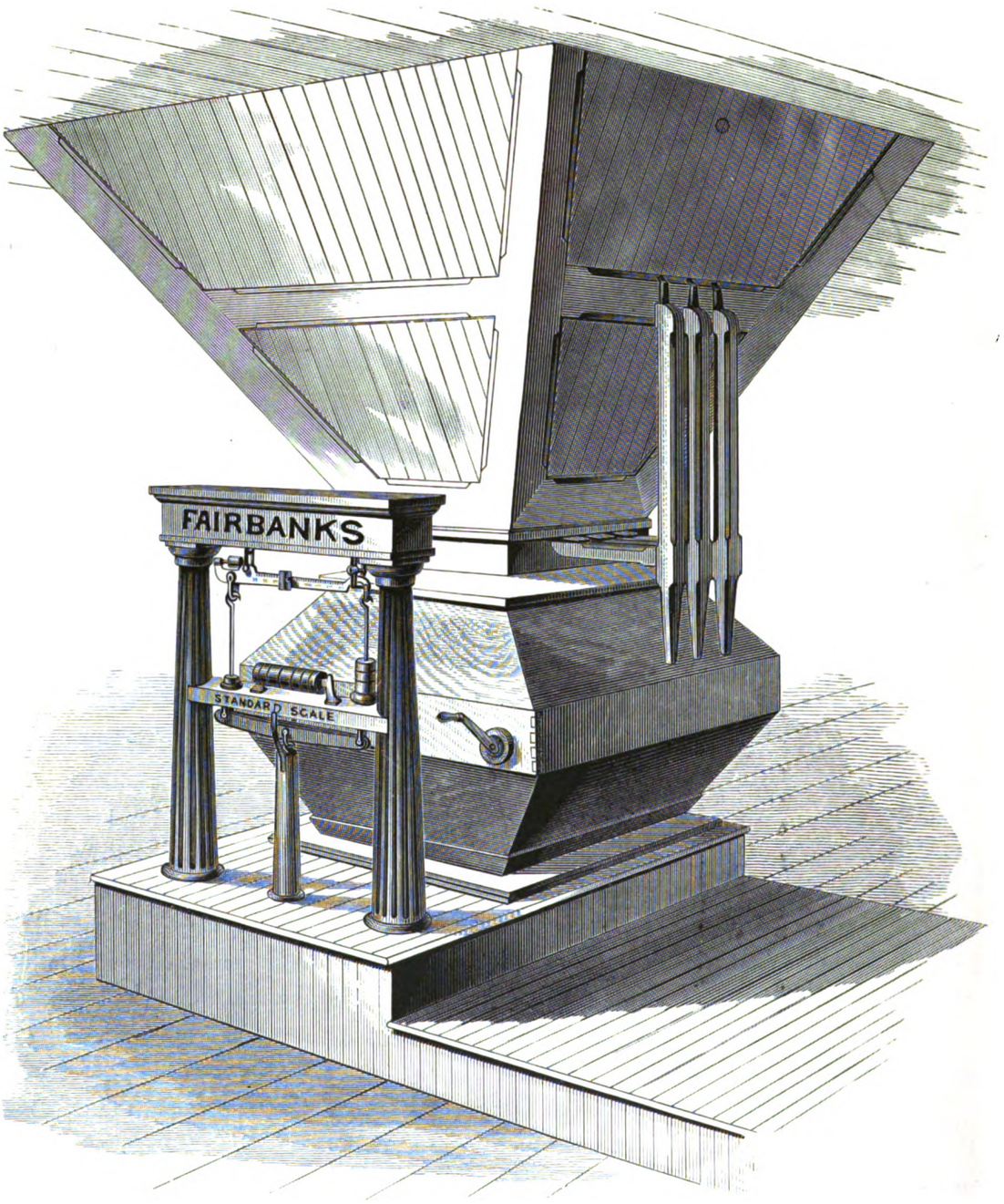
By this method, when there is a difference in weight between two parties, it may be ascertained, if the difference was made (as is often the case) in transferring the figures from the scale to the book.

This invention is being applied to many scales in the large grain elevators throughout the country, as well as to scales for all other kinds of business.

FAIRBANKS'

DORMANT GRAIN WEIGHING SCALE,

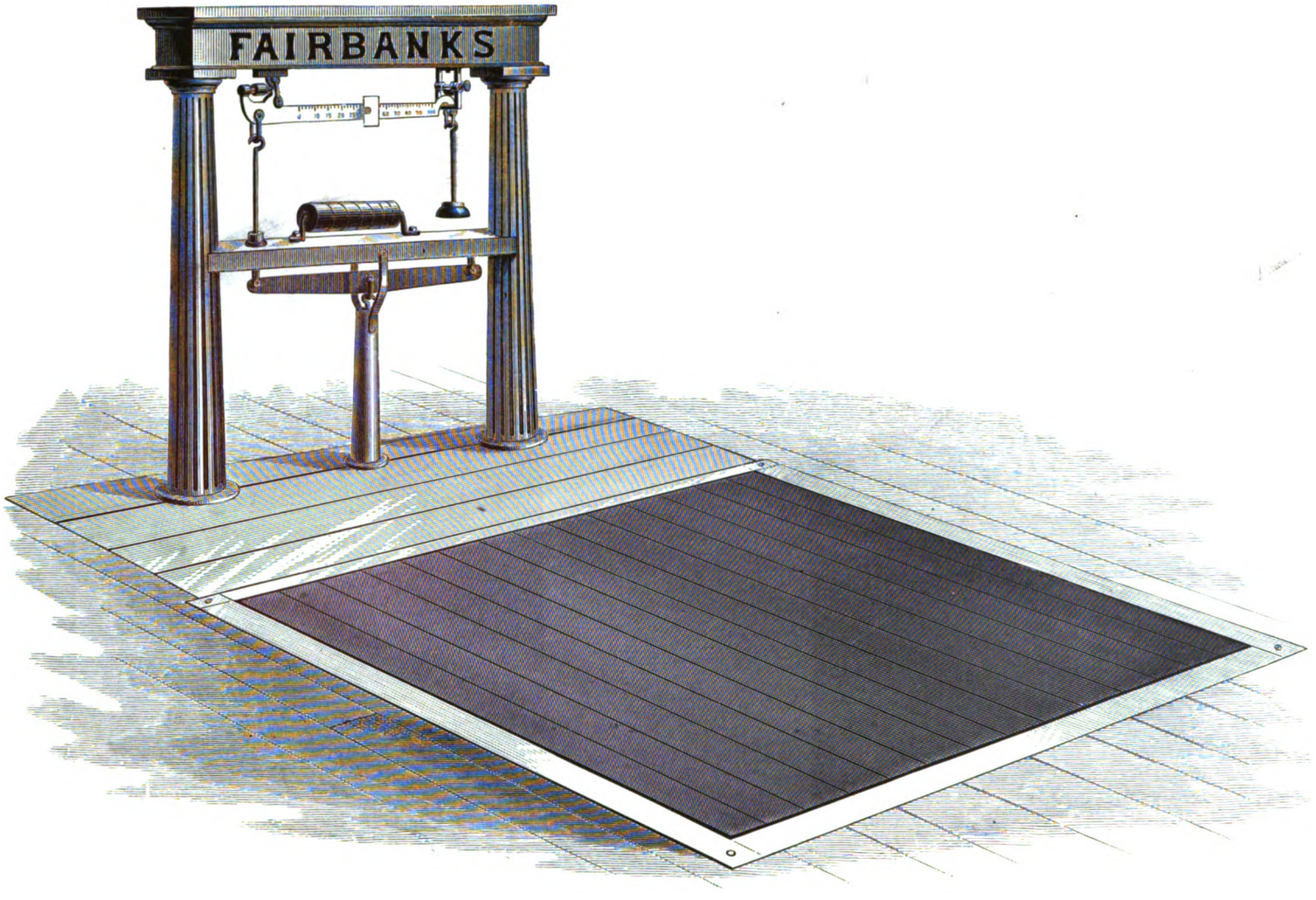
WITH IRON PILLARS.



CAPACITY, 30 BUSHELS TO 1,000 BUSHELS.

PRICES AND PARTICULARS FURNISHED ON APPLICATION.

FAIRBANKS' RAILROAD DEPOT SCALES.

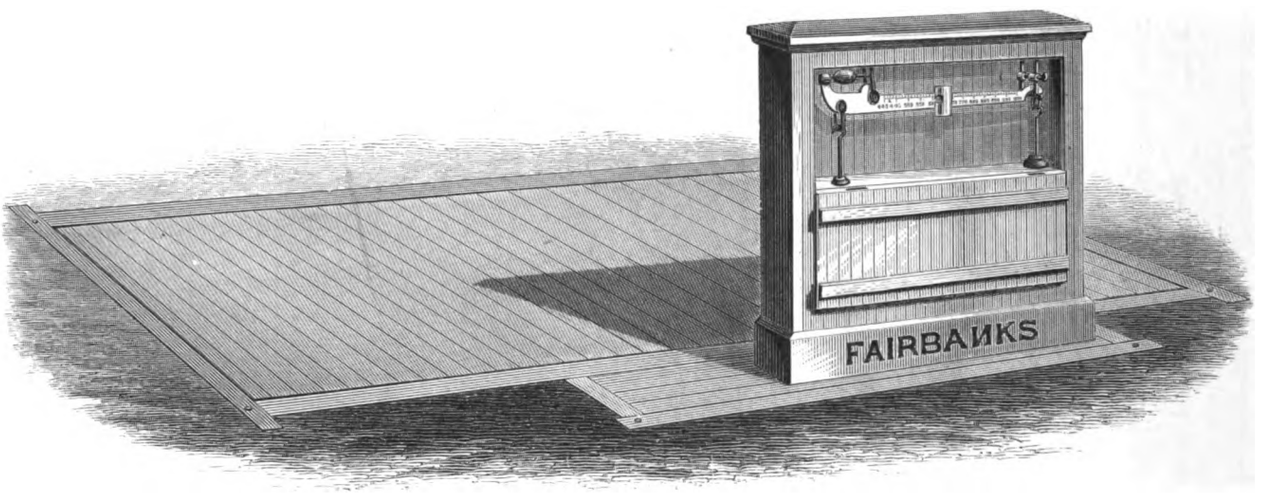


No. 2264.—Capacity, 6 tons ; Platform, 9 ft. 2¼ in. × 10 ft., Price, $280.00
No. 2266.—Capacity, 4 tons ; Platform, 6 ft. 11 in. × 9 ft., " 230.00
No. 2268.—Capacity, 3 tons ; Platform, 4 ft. 11¾ in. × 6 ft., Price, $210.00
No. 2270.—Capacity, 2 tons ; Platform, 4 ft. 8¾ in. × 7½ ft., " 168.00

ABOVE PRICES EXCLUSIVE OF FOUNDATION AND TIMBER.

FAIRBANKS'

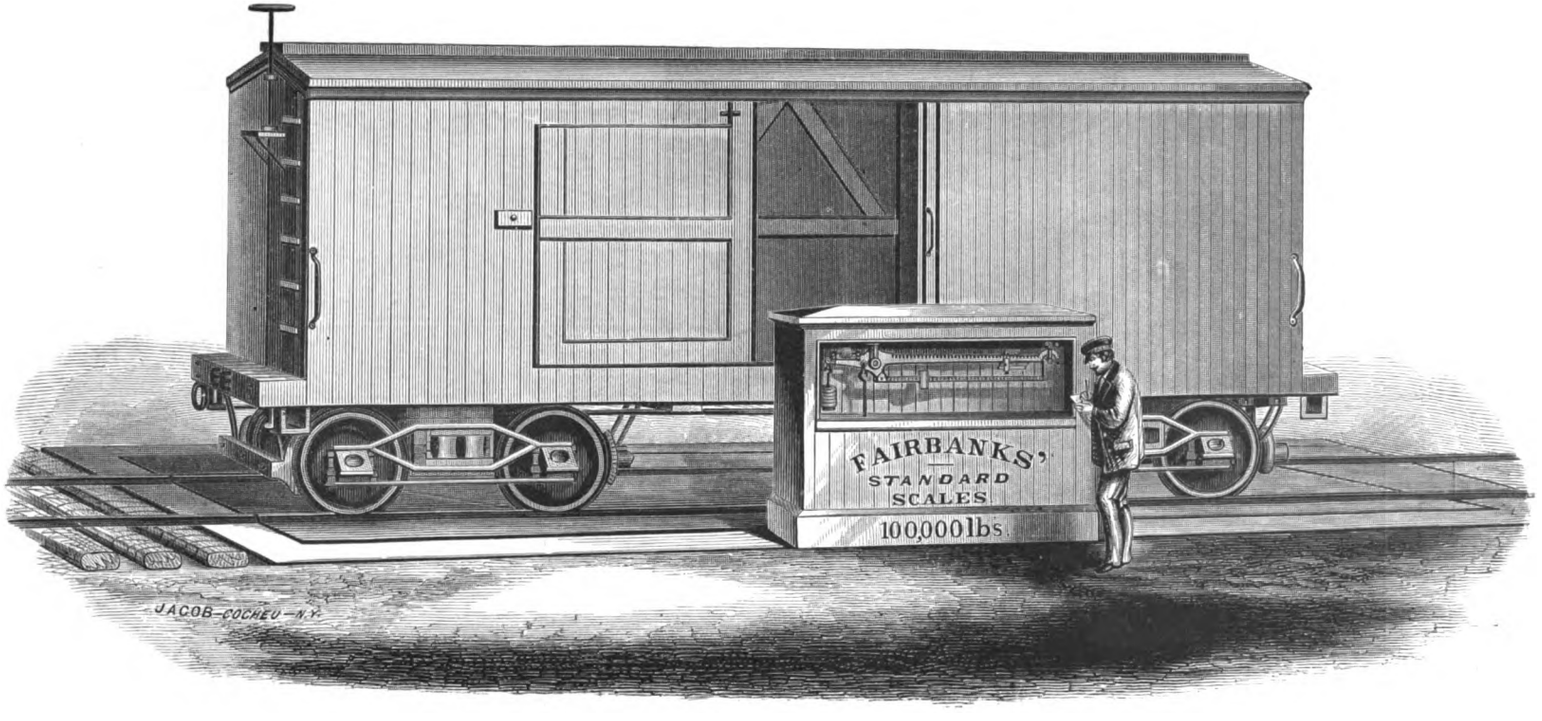
STOCK, HAY AND COAL SCALES.



CAPACITY, 2 TONS TO 15 TONS.

SIZE OF PLATFORM TO MEET ALL REQUIREMENTS.

FAIRBANKS' RAILROAD TRACK SCALES.



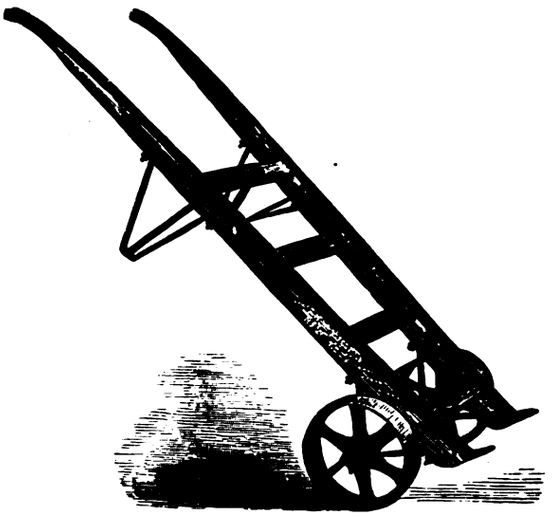
CAPACITY, FROM 20 TONS TO 150 TONS. LENGTH, FROM 20 FEET TO 130 FEET.

TRUCKS.

NEW YORK PATTERN TRUCKS.

SIZE.	Length of Handles. Ft. In.	Width at Nose. Inches.	Width at Upper Bar. Inches.	Size of Wheel. Inches.	Price.
No. 0.	3 6½	12	13¼	6½ × 1¾	$4.50
No. 1.	4 1	13⅞	15⅝	6½ × 1¾	4.85
No. 2.	4 5	15	16½	7¾ × 1⅞	6.00
No. 3.	4 8	16	17¾	8¾ × 2¼	7.00
No. 4.	5 0	16¼	17¾	9¾ × 2¼	8.00
No. 5.	5 4	17¼	18⅞	10¾ × 2¾	9.50

COTTON NOSE TRUCKS.



SIZE.	Length of Handles. Ft. In.	Width at Nose. Inches.	Width at Upper Bar. Inches.	Size of Wheel. Inches.	Price.
No. 1.	4 1	13⅞	15¾	6½ × 1¾	$6.75
No. 2.	4 5	15	16½	7¾ × 1⅞	7.75
No. 3.	4 8	16	17¾	8¾ × 2¼	9.25
No. 4.	5 0	16¼	17¾	9¾ × 2¼	10.50
No. 5.	5 4	17¼	18⅞	10¾ × 2¾	12.00
No. 10.	6 1	22⅝	21	14 × 3	18.00

BOSTON PATTERN TRUCKS.

SIZE.	Length of Handles. Ft. In.	Width at Nose. Inches.	Width at Upper Bar. Inches.	Size of Wheel. Inches.	Price With Wheels Outside.	Price With Wheels Inside.	With Patent Rubbered Wheels.
No. 0.	4 2	11	15¼	6½ × 1½	$5.00	$5.75	$9.00
No. 1.	4 2	11¾	15¼	6½ × 1½	5.25	6.00	9.25
No. 2.	4 7	14	18	7½ × 2	6.25	7.25	11.50
No. 3.	4 9	14¾	18¼	9½ × 3¼	9.00	11.00	15.50
No. 4.	5 6	15	19¼	11¼ × 3¾	12.50	....	22.50
No. 5.	6 1	15⅛	20¼	11¾ × 3¾	14.00	....	25.00
No. 6.	6 4	16¼	21⅞	12 × 3¾	19.00	....	30.00

NEW YORK BARREL TRUCKS.

SIZE.	Length at Handles. Ft. In.	Width at Nose. Inches.	Width at Upper Bar. Inches.	Size of Wheel. Inches.	Price.
No. 0.	3 6½	12	13¼	6½ × 1¾	$7.00
No. 1.	4 4	13⅞	15⅝	6½ × 1¾	7.00
No. 2.	4 5	15	16½	7¾ × 1⅞	9.50
No. 3.	4 8	16	17¾	8¾ × 2¼	10.00
No. 4.	5 0	16¼	17¾	9¾ × 2¼	12.00
No. 5.	5 4	17¼	18⅞	10¾ × 2¾	13.00

For all iron slats, add $1.00 to the list.

TRUCKS.

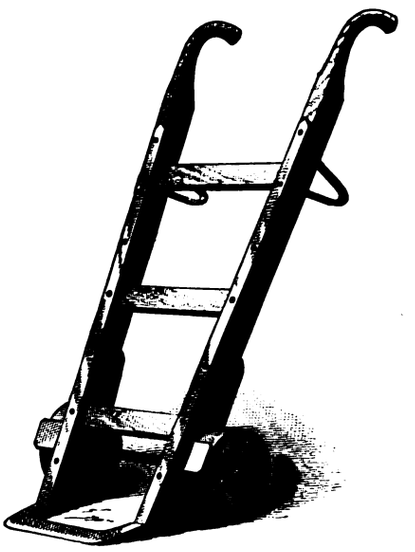
NEW STEVEDORE TRUCK.

Length of Handles, 60 in.; width at Nose, 13¼ in.; width at Upper Bar, 17 in.; size of Wheels, 10 × 3 in.

Price, ... $16.00

The above cut represents the strongest truck for railroad and steamer use made.

DRY GOODS TRUCK.

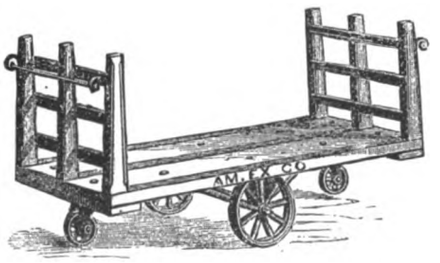


TWO-WHEEL, BENT HANDLES.

No. 1, Width at Nose, 15 in.; width at Upper Bar, 19½ in.; size of Wheel, 7½ × 2¼ in.

Price, ... $11.00

HEAVY DRY GOODS TRUCK.



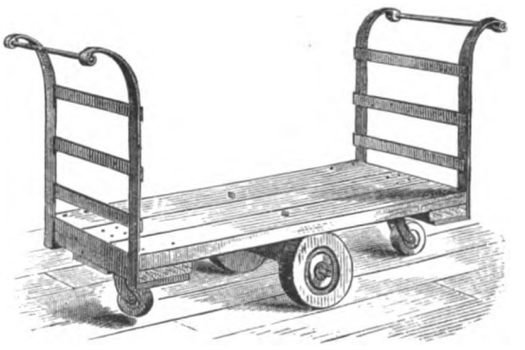
ALL IRON WHEELS.

No. 1, Platform, 5 × 2 ft.; Castor Wheels, 7¼ × 1⅝ in.; Side Wheels, 13 × 1⅝ in.

This truck is used largely by express companies.

Price, ... $30.00

DRY GOODS TRUCK.

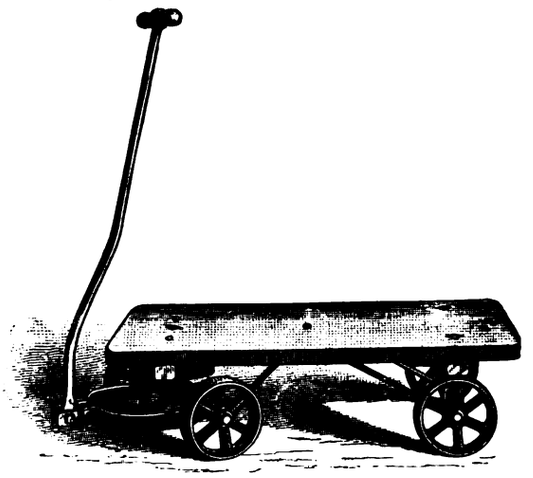


Size, 3 ft. 6 in. by 2 ft., . . $16.00
With Rubbered Wheels, . . 25.00

For the dry goods trade, cloth trade, and hotels, this truck is very useful. It has great capacity, is durable, makes little noise, and does not injure the floor. It is hung on two large wooden wheels, with one small wooden castor wheel at each end, for convenience in turning.

TRUCKS AND BARROWS.

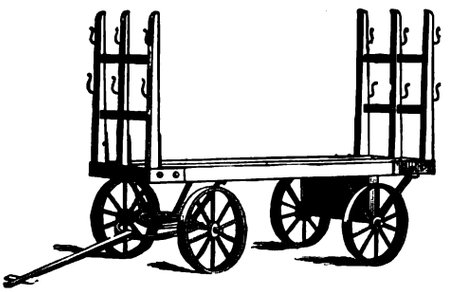
PLATFORM TRUCKS.



WITH FOUR WHEELS.

SIZE OF PLATFORM.	Price.	With Rubbered Wheels.
No. 1, 3 ft. × 2 ft., . . .	$11.00	$20.00
No. 2, 3 ft. 2 in. × 2 ft. 2 in., .	12.00	21.00
No. 3, 3 ft. 4 in. × 2 ft. 4 in., .	14.00	23.00
No. 4, 3 ft. 6 in. × 2 ft. 6 in., .	15.00	24.00
No. 5, 3 ft. 8 in. × 2 ft. 8 in., .	16.00	26.00
No. 6, 3 ft. 10 in. × 2 ft. 10 in., .	18.00	27.00

FOUR-WHEEL EXPRESS BARROWS.



No. 1, 8 ft. long × 24 in. wide, . . Price, $75.00
No. 2, 10 ft. long × 24 in. wide, . . " 100.00
No. 3, 12 ft. long × 28 in. wide, . . " 125.00

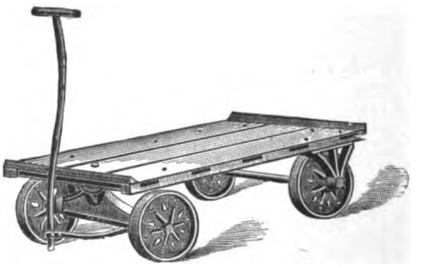
METAL TRUCK.

Size of Platform, 42 in. long × 20 in. wide. Wheels, 11 × 3¾ in.

This is a very heavy, strong and durable truck, made for handling tin plate, pig tin and other metals.

Price, ... $25.00

GRAIN OR WHEAT WAGONS.

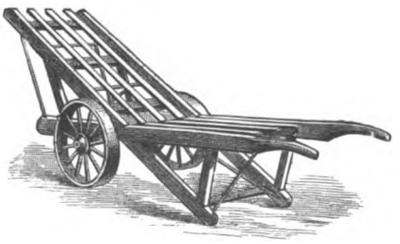


EXTRA HEAVY—VIBRATORY AXLES.

No. 10, 14 in. Wheels, Platform 3 × 5 ft., Price, $33.00
No. 11, 14 in. Wheels, Platform 4 × 6 ft., " 35.00
No. 12, 18 in. Wheels, Platform 6 × 8 ft., " 45.00

SLOPING BACK BAGGAGE BARROWS.

No. 1, 6 ft. long × 24 in. wide, $30.00
No. 2, 9 ft. long × 27 in. wide, 38.00
No. 3, 9 ft. long × 30 in. wide, 50.00

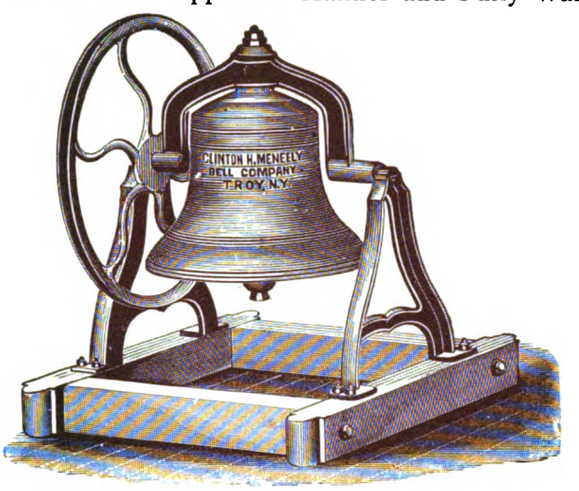


No. 1, Extra Heavy, . $40.00
No. 2, Extra Heavy, . 45.00
No. 3, Extra Heavy, . 60.00

BELLS.

CHURCH, SCHOOL, TOWER-CLOCK, FACTORY, CHIME, COURT-HOUSE, FIRE ALARM AND OTHER BELLS.

Mounted in the Most Approved Manner and Fully Warranted.



CHURCH BELLS.

Fully warranted as to excellence of tone, purity of composition and strength of casting, mounted in the most approved manner, of weight, dimensions, &c., noted in the accompanying table.

BELL.			MOUNTINGS.		
Weight.	Medium Tone.	Diameter.	Size of Frame—Outside.	Diameter of Wheel.	Price of Mountings.
400 pounds.	D	27 inches.	3 feet 6 inches by 3 feet 6 inches.	4 feet 4 inches.	$30.00
450 "	C♯	28 "	3 " 6 " 3 " 6 "	4 " 4 "	30.00
500 "	C♯	29 "	3 " 9 " 3 " 11 "	4 " 6 "	35.00
550 "	C	30 "	3 " 9 " 3 " 11 "	4 " 6 "	35.00
600 "	B	31 "	3 " 9 " 3 " 11 "	4 " 6 "	35.00
700 "	B	33 "	4 " 1 " 4 " 5 "	5 " 6 "	40.00
800 "	B♭	34 "	4 " 1 " 4 " 5 "	5 " 6 "	40.00
900 "	A	36 "	4 " 5 " 4 " 7 "	5 " 9 "	45.00
1,000 "	A	37 "	4 " 5 " 4 " 7 "	5 " 9 "	45.00
1,100 "	A	38 "	4 " 8 " 4 " 11 "	5 " 9 "	45.00
1,200 "	A♭	39 "	4 " 8 " 4 " 11 "	6 " 3 "	55.00
1,300 "	A♭	40 "	4 " 8 " 4 " 11 "	6 " 3 "	55.00
1,400 "	G	41 "	5 " 0 " 5 " 3 "	6 " 6 "	70.00
1,500 "	G	42 "	5 " 0 " 5 " 3 "	6 " 6 "	70.00
1,600 "	F♯	43 "	5 " 0 " 5 " 3 "	6 " 6 "	70.00
1,800 "	F♯	45 "	5 " 5 " 5 " 8 "	7 " 0 "	90.00
2,000 "	F	46 "	5 " 5 " 5 " 8 "	7 " 0 "	90.00
2,100 "	F	47 "	5 " 5 " 5 " 8 "	7 " 0 "	90.00
2,300 "	E	49 "	5 " 5 " 6 " 1 "	7 " 6 "	115.00
2,500 "	E	50 "	5 " 5 " 6 " 1 "	7 " 6 "	115.00
2,800 "	E♭	51 "	6 " 2 " 6 " 9 "	8 " 0 "	130.00
3,000 "	E♭	53 "	6 " 2 " 6 " 9 "	8 " 0 "	130.00
3,500 "	D	56 "	6 " 2 " 6 " 9 "	8 " 0 "	140.00
4,000 "	C♯	58 "	6 " 2 " 6 " 9 "	8 " 0 "	140.00
4,500 "	C	61 "	6 " 2 " 6 " 9 "	8 " 0 "	140.00
5,000 "	C	63 "	7 " 2 " 7 " 8 "	9 " 0 "	165.00
5,500 "	B	65 "	7 " 2 " 7 " 8 "	9 " 0 "	175.00
6,000 "	B♭	67 "	7 " 2 " 7 " 8 "	9 " 0 "	190.00

The actual weights usually exceed those designating the patterns noted above from 2 to 3 per cent.

The medium in the range of tones which the given weight of metal is capable of producing is that referred to. This range of tone (quality considered) is, necessarily, very limited.

The fractional parts of an inch are taken as a whole in the measurement of the diameters given above.

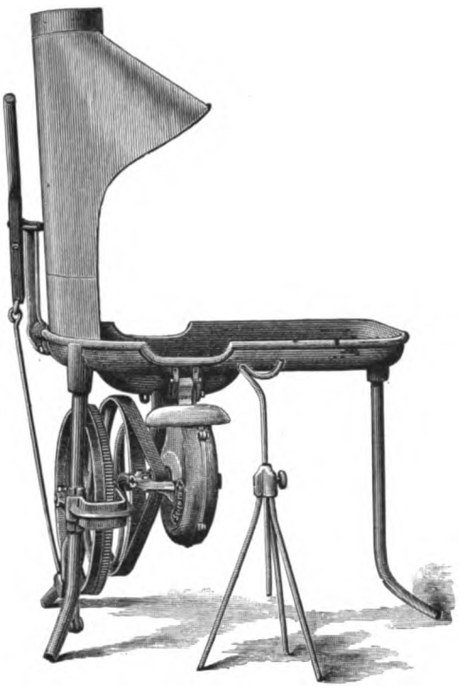
THE PRICE OF A BELL IS COMPUTED BY THE POUND. THE MOUNTINGS ARE AN ADDITIONAL CHARGE.

SCHOOL, FACTORY AND DEPOT BELLS,

Of weight from 100 pounds to 375 pounds, as per accompanying table, with complete mountings, including "ROTARY YOKE," so arranged as to permit the ready turning of the bell and prevent liability of fracture; WHEEL of Iron; Substantial FRAME and Iron STANDARDS. Steel SPRINGS are also furnished. Small Churches, Chapels, &c., are frequently supplied with bells of this class.

BELL.		MOUNTINGS.	
Weight.	Diameter.	Size of Frame—Outside.	Price of Mountings.
100 pounds.	17 inches.	2 feet 5 inches by 2 feet 8 inches.	$13.00
125 "	18½ "	2 " 6 " 2 " 8 "	13.00
150 "	19½ "	2 " 6 " 2 " 8 "	15.00
175 "	20½ "	2 " 8 " 3 " 1 "	20.00
200 "	21½ "	2 " 8 " 3 " 1 "	20.00
225 "	22 "	2 " 8 " 3 " 1 "	20.00
250 "	23 "	3 " 0 " 3 " 2 "	23.00
275 "	24 "	3 " 0 " 3 " 2 "	23.00
300 "	24½ "	3 " 1 " 3 " 4 "	23.00
325 "	25 "	3 " 1 " 3 " 4 "	25.00
350 "	26 "	3 " 1 " 3 " 4 "	27.00
375 "	26½ "	3 " 1 " 3 " 4 "	27.00

SCIENTIFIC PORTABLE FORGES.



No. 1, Forge.

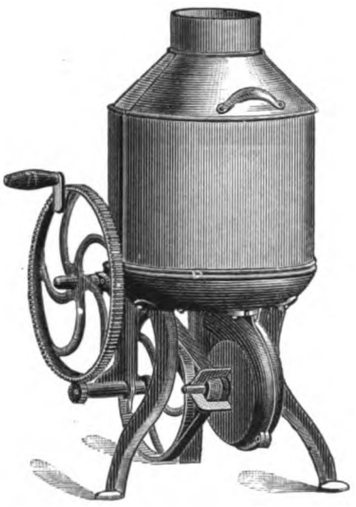
No. 2, Forge. Style A.

All the Levers on Scientific Portable Forges are detachable and have Ball Bearings. Always ready to start. No dead centres. Easy running. Latest improvements. The most complete and desirable Forge in the market.

No. 2, Forge. Style B.

No. 3, Forge. Style A.

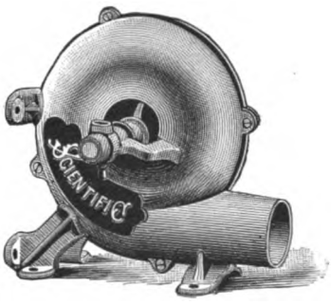
SCIENTIFIC PORTABLE FORGES.



No. 6, FORGE. STYLE C.

THE "SCIENTIFIC" POWER BLOWER.

WITH STEEL SHAFT.



The only Low Priced Blower having Steel Shaft.

Blower No. 60, 8 inch, . $8.00
Blower No. 66. 12 " . 10.00
Blower No. 70, 18 " . 14.00

When required for exhaust, add $2.00 to above prices.

NEW HAND BLOWER.

DESCRIPTION AND PRICES.

No. 1. Hearth, 28 x 40 in.; Fan, 12 in.; Weight, 270 pounds. DROP DOORS and Iron Rest. Adapted to heavy blacksmith work, ... $50.00

No. 2, A. Hearth, 21 x 27 in.; Fan, 8 in.; Weight, 150 pounds. Ball Bearings. For machine shops and blacksmiths, ... 40.00

No. 2, B. Hearth, 21 x 27 in.; Fan, 8 in.; Weight, 150 pounds. Shelf Attachment extra. For boiler makers, bridge, ship and railroad work, ... 36.00

No. 2, C. Hearth, 21 x 27 in.; Fan, 8 in.; Weight, 155 pounds. Closed Hood. Revolving Door. For jewelers, locksmiths, dentists, planing and saw mills, varnish and sugar works, oil refineries, assay work, ... 42.00

No. 3, A. Round Hearth, 18 in. diameter; Weight, 80 pounds. Hood. For model makers, plumbers, farmers and machinists, ... 27.00

No. 3, B. Round Hearth, 18 in. diameter; Weight, 75 pounds. Shelf extra. For boiler makers, repairers, miners, and prospectors, ... 24.00

No. 3, C. Round Hearth, 18 in. diameter; Weight, 85 pounds. Closed Hood. For all purposes where desirable to prevent escape of fumes, ... 30.00

No. 6, A. Round Hearth. Weight, 45 pounds. Hood. For miners and farmers, ... 18.00

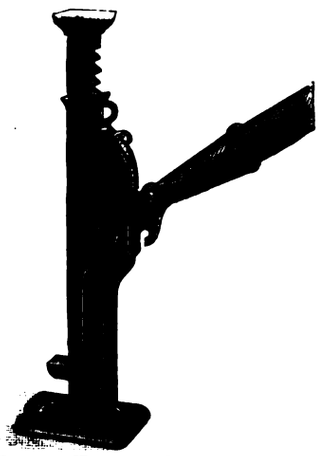
No. 6, B. Round Hearth, 14 in. diameter; Fan, 8 inch; Weight, 45 pounds. For all kinds of light work, ... 16.00

No. 6, C. Round Hearth, 14 in. diameter; Fan, 8 in.; Hood. For bench work of all kinds, . 20.00

New Hand Blower, with Tuyere Iron complete, for application to any stationary Forge, . 25.00

THE BARRETT

PATENT COMPOUND LEVER JACKS.

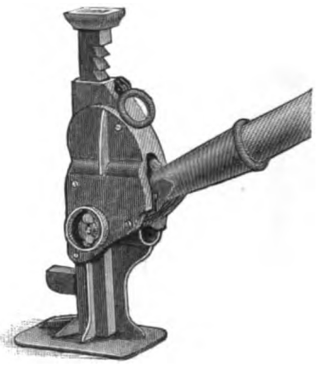


No. 1, TRACK JACK.

This is the only Lever Jack which lowers automatically. Built of Steel and Malleable Iron. All our Lever Jacks have the Bars and Pawls made of Steel, the Frames and Lever Socket of Malleable Iron. Two Pawls are attached to the Lever, and the Bar is raised by both the up and down movements, instead of by the downward movement only, as in ordinary Jacks, giving twice the ordinary speed and enabling us to use a tooth of double the size in the Bar for the power applied.

The Bar is lowered or raised by the same movement of the Lever, this being accomplished by simply turning a thumb piece on the side of the Jack.

In accomplishing this we have overcome the great objection to the ordinary Lever Jack, and have placed it successfully in competition with the Hydraulic Jack at one-third or one-quarter the cost.

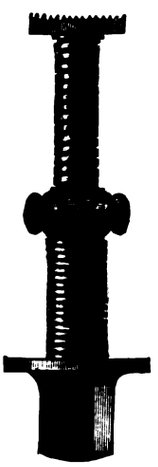


NOS. 2, 3, 4 AND 5.

The No. 1 Track Jack is constructed especially for Track work. The Bar and Pawls are of Steel; the frame of Malleable Iron. Is raised both by the upward and downward motion of the lever. It can be lowered slowly if necessary, or it can be lowered instantly by one motion of the lever. We think it the best Track Jack in the market.

Our No. 5 Jack is especially adapted for locomotive, heavy car and wrecking work.

No.	Height with Bar Down.	Height with Bar Raised.	Size of Bar.	Rise of Bar.	Weight.	Capacity.	Price.
1	24 inches.	37½ inches.	1½ × 1½ inches.	13½ inches.	50 lbs.	4 tons.	$18.00
2	20½ "	30½ "	1⅝ × 1⅝ "	10 "	63 "	10 "	25.00
3	26½ "	41½ "	2 × 1½ "	15 "	80 "	12 "	30.00
4	20½ "	30½ "	2¼ × 2 "	10 "	95 "	15 "	35.00
5	28 "	43 "	2¼ × 2 "	15 "	110 "	15 "	40.00



OPEN.

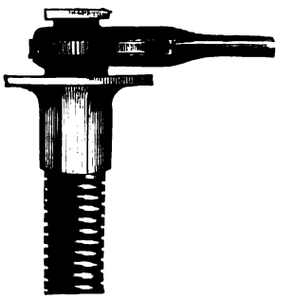
DOUBLE SCREW HOUSE JACKS.

Height when closed, 6 inches; when up or out in safety, 22 inches. Diameter of small screw, 2½ inches; diameter of large screw, 3½ inches. Weight, 80 pounds.

Price, ... $35.00

This is our Standard House Jack, but we can make either larger or smaller sizes if wanted. We also make the old style House Jack, of any size or length required. Prices furnished on application.

Builders and house raisers will find our Differential House Jack superior to all others for use in their business, owing to the fact that it combines both speed and economy of labor, as it will work under one-half the space, and has double the speed of an ordinary screw, and will raise the weight from a lower to a greater height than any other Jack made, thus avoiding blocking up as frequently as with other Jacks.

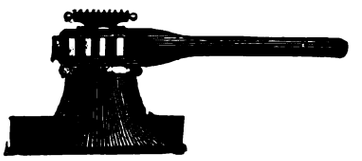


CLOSED.

THE DUFF

PATENT DIFFERENTIAL SCREW JACKS.

OPEN.



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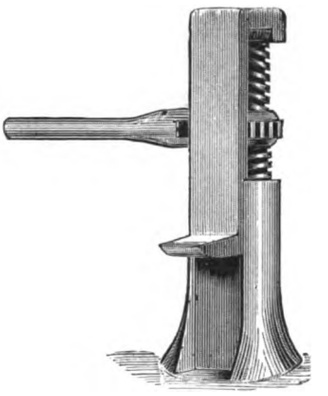


WITH GROUND OR FOOT LIFT.

WROUGHT AND STEEL SCREWS AND MALLEABLE IRON BASE.

The height of these Jacks when open is MORE than double their height when closed. A Jack 10 inches high when closed will raise a load 12 inches. Will work under a LOWER space and raise a load to a greater height than any other Jack of same size.

No.	Height, Closed.	Height, Open.	Diameter of large Screw.	Diameter of small Screw.	Capacity.	Weight.	Price.	Extra for Foot Lift.
10	6 inches.	14 inches.	1¾ inches.	1¼ inches.	3 tons.	8 lbs.	$10.00	....
11	8 "	18 "	3 "	2 "	10 "	34 "	22.00	....
12	10 "	22 "	3 "	2 "	10 "	38 "	25.00	....
13	13 "	30 "	3⅛ "	2⅛ "	15 "	54 "	30.00	$4.00
14	16 "	39 "	3¼ "	2¼ "	20 "	68 "	34.00	5.00
15	16 "	39 "	3½ "	2½ "	30 "	84 "	40.00	5.50
16	19 "	48 "	3¾ "	2¾ "	40 "	100 "	45.00	6.00

BELL BOTTOM JACK SCREWS

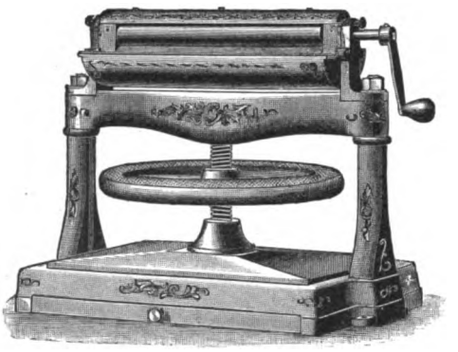
FOR ALL USES.

No.	Diameter of Screw.	Height of Barrel.	Height of Jack when Turned Down to the Lowest Point.	Net Rise.	Whole Height.	Weight.	Price.
1	1¼ inches.	6 inches.	8 inches.	4 inches.	12 inches.	10 lbs.	$2.50
2	1¼ "	7 "	10 "	6 "	16 "	11¾ "	3.00
3	1½ "	7½ "	10 "	5 "	15 "	18½ "	3.25
4	1½ "	9 "	12 "	7 "	19 "	18 "	3.75
5	1½ "	10½ "	14 "	9 "	23 "	25 "	4.00
6	1¾ "	9 "	12 "	6 "	18 "	24 "	4.25
7	1¾ "	10½ "	14 "	8 "	22 "	28¾ "	4.50
8	1¾ "	12½ "	16 "	10 "	26 "	33½ "	5.00
9	1¾ "	15 "	18 "	12 "	30 "	37½ "	5.50
10	2 "	8½ "	12 "	5 "	17 "	31 "	5.50
11	2 "	10½ "	14 "	7 "	21 "	36 "	6.00
12	2 "	12 "	16 "	9 "	25 "	41½ "	7.00
13	2 "	16 "	20 "	13 "	33 "	50 "	8.00
14	2½ "	10 "	14 "	8 "	22 "	48 "	8.50
15	2½ "	12 "	16 "	10 "	26 "	53¼ "	9.50
16	2½ "	15½ "	20 "	14 "	34 "	69 "	11.00
17	2½ "	20 "	24 "	18 "	42 "	85 "	13.00

BAILEY'S PATENT COPYING MACHINE.

THIS MACHINE COMBINES

A MOISTENING ATTACHMENT, consisting of a covered tank holding water (which can be easily detached for purpose of changing water), in which turns one of two rollers, imparting uniform moisture to Copying Pads in passing through.



A PRESS, having a LARGE HAND WHEEL in the centre of a DOUBLE ACTING COMPRESSING SCREW, whereby proper pressure is RAPIDLY and EASILY produced.

AN AIR TIGHT DRAWER, for holding the Copying Pads moist and ready for INSTANT USE.

All Presses have the DOUBLE ACTING, SINGLE THREAD SCREW; also, the PATENT KNURLED HAND WHEEL.

FINISHED IN COLORS (LAKE AND BRONZE).

No. 1 —Receives Book 10 × 13 ; Extreme Length of Base, 17 inches,	Price,	$33.00
No. 2 —Receives Book 11 × 15½ ; Extreme Length of Base, 19 inches,	"	40.00
No. 2½—Receives Book 14 × 18 ; Extreme Length of Base, 22¾ inches,	"	55.00
No. 3 —Receives Book 16 × 21 ; Extreme Length of Base, 26 inches,	"	70.00
No. 4 —Receives Book 18 × 24 ; Extreme Length of Base, 31⅛ inches,	"	85.00

All the metal parts which come in contact with water are nickel plated, so as to prevent rust.

FINISHED IN BLACK (JAPANNED, WITH GILT STRIPE).

We also manufacture a line of these Machines embodying the same features, finished plainer than the above (Japanned, with Gilt Striping), but equally effective, at the following prices:

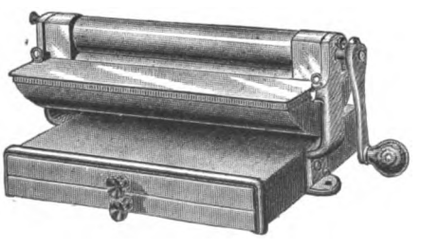
No. 31 —Receives Book 10 × 13 ; Extreme Length of Base, 17 inches,	Price,	$25.00
No. 32 —Receives Book 11 × 15½; Extreme Length of Base, 19 inches,	"	30.00
No. 32½—Receives Book 14 × 18 ; Extreme Length of Base, 22¾ inches,	"	45.00
No. 33 —Receives Book 16 × 21 ; Extreme Length of Base, 26 inches,	"	60.00
No. 34 —Receives Book 18 × 24 ; Extreme Length of Base, 31⅛ inches,	"	75.00

The base and platen on all our Copying Machines are accurately planed.

MOISTENING APPLIANCES,

SEPARATE,

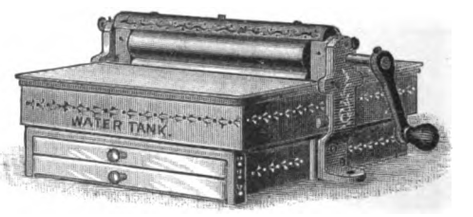
FOR USE WITH ANY ORDINARY COPYING PRESS, WITH ELASTIC COPYING PADS.



No. 9—Moistens Copying Pads, 10 × 12 inches, Price, $18.00
No. 10—Moistens Copying Pads, 10 × 14 inches, " 20.00

SPECIAL SIZES MADE TO ORDER.

Especially designed to meet the wants of those who are not disposed to part with their old Copying Presses, but desire to avail themselves of some of the advantages of modern improvements at a moderate cost.



The illustration here shown represents our New Style Machine, which may be used in the same manner as Nos. 9 and 10, or the Copying Pads may be placed in the Water Tank, and wrung out directly from the water, which effectively prevents offset when the Pads are used in immediate succession, and very strong Ink is used.

This arrangement is preferable for houses having a large correspondence. The Water Tank is readily removed for the purpose of cleansing, etc.

No. 17—10½ × 15 inches,	Price,	$22.00
No. 18—13 × 18 inches,	"	27.00
No. 19—15 × 20 inches,	"	32.00
No. 20—18 × 24 inches,	"	38.00

COPYING PRESSES.

We have also added to our list a line of Copying Presses designed to meet a demand for a lower priced article than our Complete Copying Machine, being constructed precisely like it, with the exception of the moistening attachment, a Book Rest taking its place.

WITH BOOK REST.

No.	Receives Book.	Extreme Length of Base.	With Drawer.	No.	Receives Book.	Extreme Length of Base.	Without Drawer.
11	10 × 13	17 inches.	$15.00	21	10 × 13	17 inches.	$13.00
12	11 × 15½	19 "	25.00	22	11 × 15½	19 "	18.00
12½	14 × 18	22¾ "	40.00	22½	14 × 18	22¾ "	35.00
13	16 × 21	26 "	55.00	23	16 × 21	26 "	50.00
14	18 × 24	31⅝ "	70.00	24	18 × 24	31⅝ "	65.00

BAILEY'S PATENT ELASTIC COPYING PADS.

Warranted far superior to anything ever tried in the way of sheets for copying letters, way bills, &c. Elastic, Waterproof, Absorbent, Indestructible.

SIZE.	9 × 11	10 × 12	10 × 14	10 × 15	12 × 17	15 × 20	17 × 23
Pads, Medium, ... Per Dozen,	$2.50	3.00	3.50	4.00	5.50	7.50	10.00
Felt, for Typewriting, . . "	3.00	3.50	4.00	4.50	6.00	8.50	12.00

Special sizes made to order.

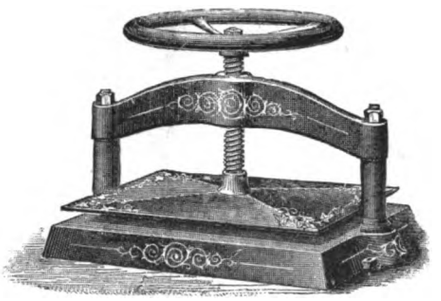
COPYING PRESS STANDS.

Size of top, 20 × 24 inches, with covered slide running right and left, furnished with four drawers, with slide on top drawer.

Full Case Cabinet Stands, handsomely finished in Walnut or Cherry (Ash or Oak made to order).

Price, $18.00.

COPYING PRESSES.



COLUMN PRESS.

D

FINISHED IN BLACK AND BRONZE.

No. 4 Receives Book 10 × 12, . . .	$5.75
No. 5 Receives Book 10 × 15, . .	7.00
No. 6 Receives Book 11 × 16, . . .	10.50
No. 8 Receives Book 12 × 18, . .	13.50

RAILROAD PRESSES.

No. 10 Receives Book 15 × 20, . . .	$20.00
No. 11 Receives Book 16 × 20, . .	25.50
No. 13 Receives Book 18 × 22, . . .	28.00
No. 15 Receives Book 20 × 24, . .	31.50
No. 20 Receives Book 24 × 32, . . .	150.00

ARCH PRESS.

A

FINISHED IN BLACK AND BRONZE.

No. 3 Receives Book 9 × 11, . . .	$5.50
No. 4 Receives Book 10 × 12, . .	6.00
No. 5 Receives Book 10 × 15, . . .	8.00

B

FINISHED IN BLACK, CARMINE AND BRONZE.

No. 3 Receives Book 9 × 11, . . .	$6.50
No. 4 Receives Book 10 × 12, . .	7.00
No. 5 Receives Book 10 × 15, . . .	9.00

Order Copying Presses by Letter and Number.

COPYING PRESS STANDS.

Walnut Case. Order by Number.

LIGHT IRON FRAME. FINISHED IN BLACK AND BRONZE.

No. 1. One Drawer and Slide for Book, . .	$8.50
No. 2. Two Drawers and Slide for Book, . .	9.50

LIGHT IRON FRAME.

HEAVY IRON FRAME. FINISHED IN BLACK AND BRONZE.

No. 3. One Drawer and Slide for Book, . .	$9.50
No. 4. Two Drawers and Slide for Book, . .	10.50

Top Board, 18 × 25. Inside of Drawer, 14 × 16 × 2½.

INDEX TO ADVERTISEMENTS.

THE FOLLOWING MANUFACTURERS ARE COMMENDED TO PURCHASERS AS PRODUCERS OF STANDARD ARTICLES IN THE VARIOUS LINES REPRESENTED.

— FOUNDED IN 1845.—

THE SILSBY MFG. CO.,

SENECA FALLS, N. Y.

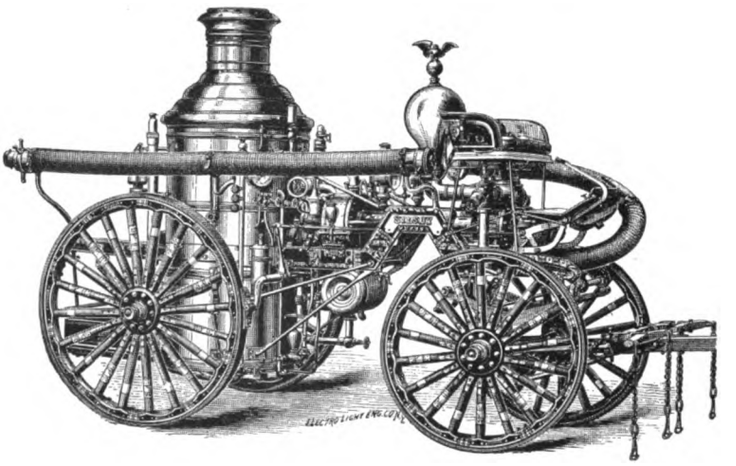
THE OLDEST AND LARGEST MANUFACTORY OF FIRE APPARATUS IN THE WORLD.

THE SILSBY ENGINE

IS THE

Most Simple,
Reliable,
Durable, and
Efficient

FIRE ENGINE IN USE.



More than 800 Silsby Engines are now in Active Service.

SEND FOR ILLUSTRATED CATALOGUE FOR 1888.

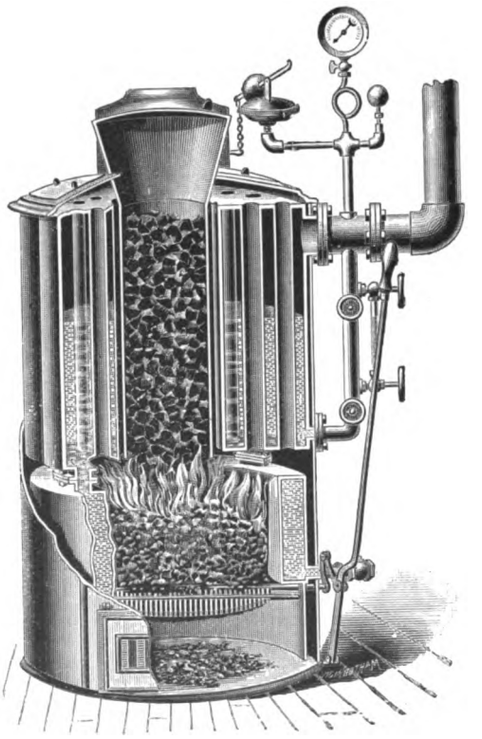
The Celebrated Silsby Steam Fire Engine and Fire Department Apparatus and Supplies of every Description. Also Iron and Bronze Rotary Pumps, of all sizes and for all purposes, adapted for either steam, water, or hand power.

THE COMFORT STEAM HEATER.

SIMPLE,
CHEAP,
SAFE.

No Brickwork required. Will not heat the cellar.

SEND FOR CATALOGUE.



ECONOMICAL,
RELIABLE,
DURABLE.

EASIER TO CARE FOR THAN A STOVE.

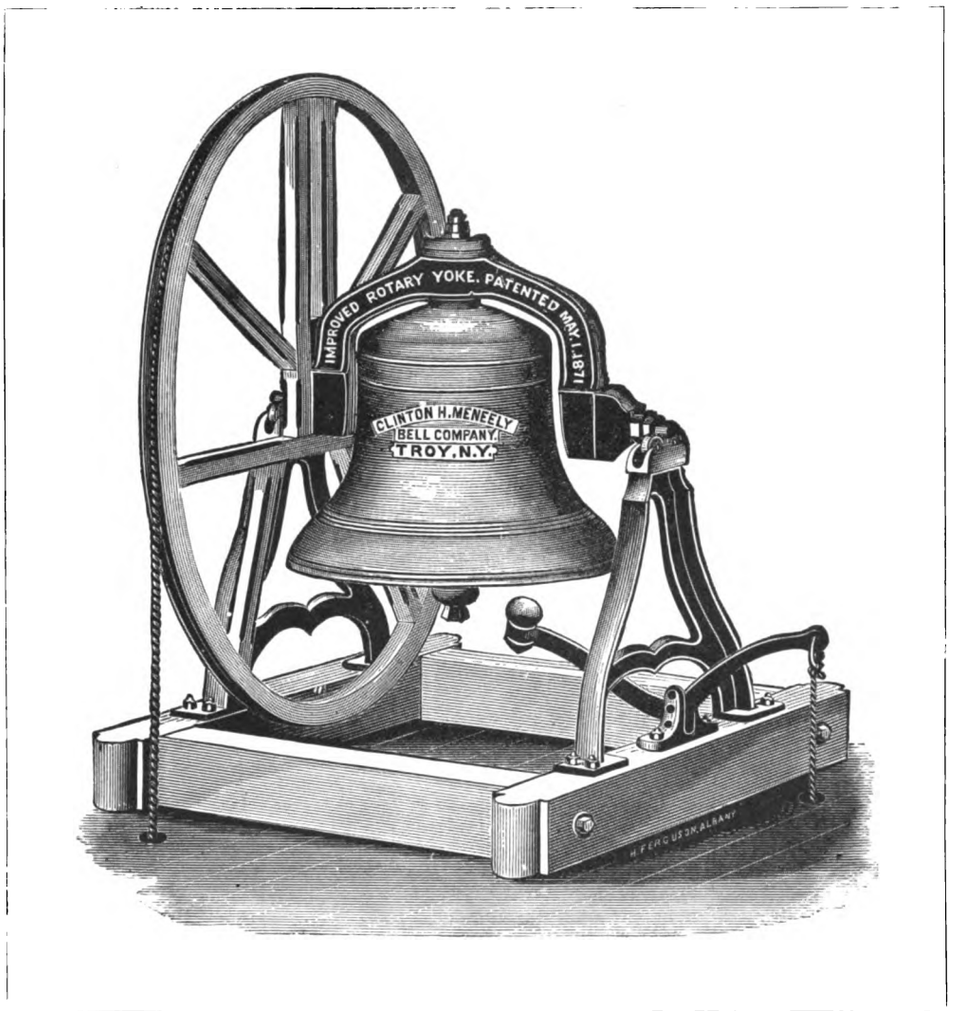
A servant or child can run it.

THE SILSBY MANUFACTURING CO.,

200 FALL STREET, SENECA FALLS, N. Y.

CLINTON H. MENEELY BELL CO.,

TROY, N. Y., U. S. A.,



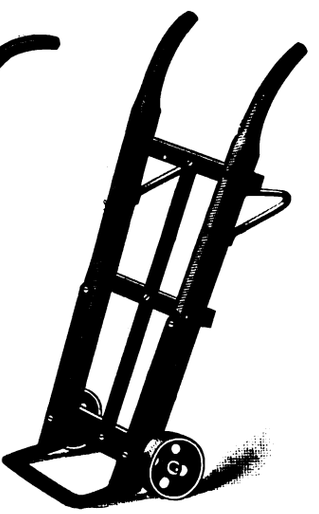
MANUFACTURERS OF

SUPERIOR BELLS.

BOSTON AND LOCKPORT BLOCK COMPANY.

LOCKPORT, NEW YORK and BOSTON, MASS.

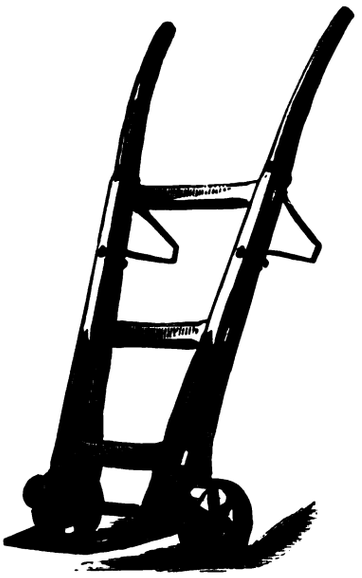
No. 160.
Bag Truck.



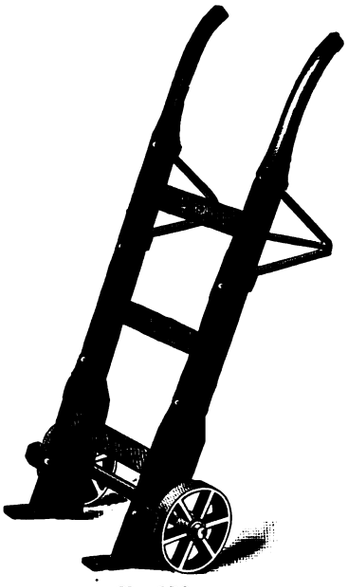
No. 163.
Handy Truck.

No. 168.
Iron Slat Barrel Truck.

No. 165.
New York Pattern Truck.



No. 164.
Boston Pattern Truck.



No. 170.
Cotton Nose Truck.

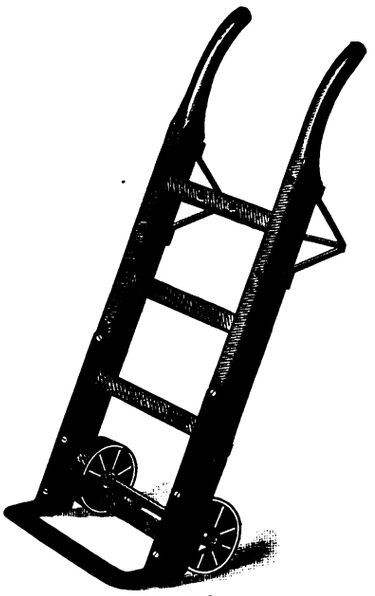
No. 166.
Steamboat Truck.

No. 143.
"Anchor" Snow Shovels.

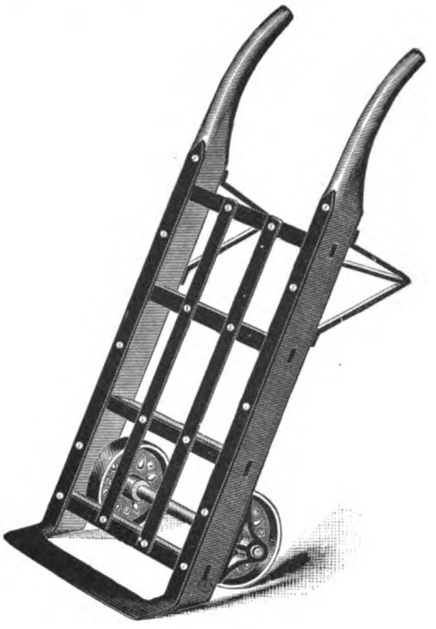
IN ORDERING TRUCKS, SPECIFY FOR THE 'ANCHOR" BRAND.

BOSTON AND LOCKPORT BLOCK COMPANY,

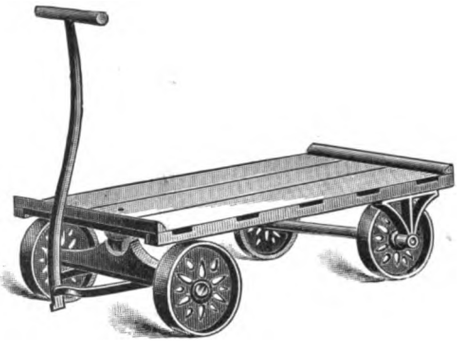
LOCKPORT, NEW YORK and BOSTON, MASS.



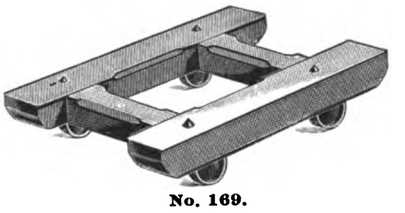
No. 156.
Western Pattern Truck.



No. 157.
Western Pattern Railroad Truck.

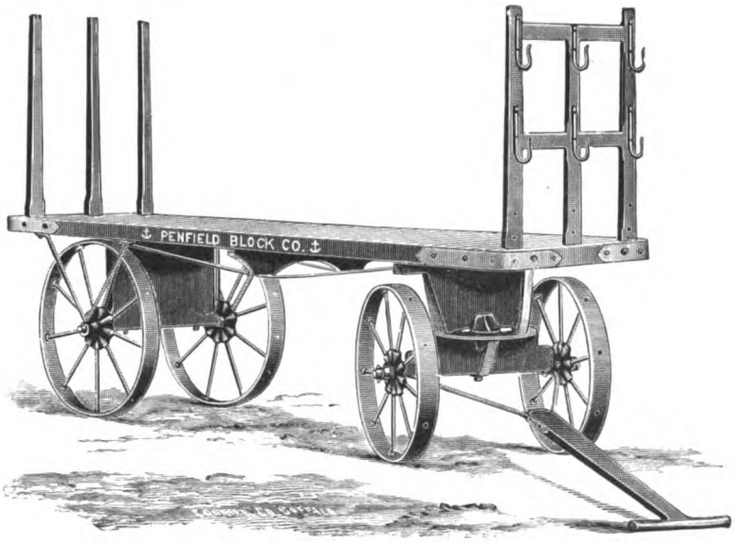


No. 159.
Platform Wagon Truck.

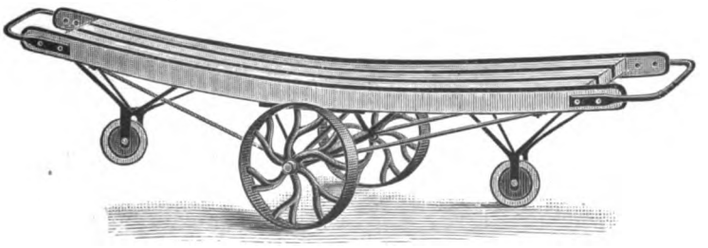


No. 169.
Four Wheel Box Truck.

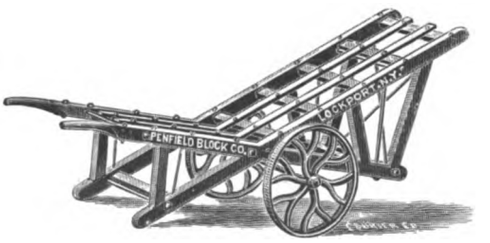
No. 176.
Meeker Wagon Jack.



No. 174.
Express Truck.



No. 171.
Curved Baggage Barrow.



No. 172.
Sloping Back Baggage Barrow.

IN ORDERING TRUCKS, SPECIFY FOR THE "ANCHOR" BRAND.

BOSTON AND LOCKPORT BLOCK COMPANY,

LOCKPORT, NEW YORK and BOSTON, MASS.

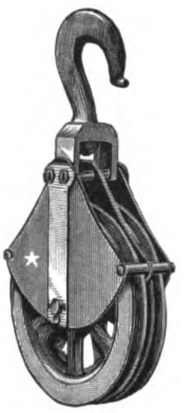
SOLID ROLL WITH SHOULDER.

CAGE HAVING FIVE POSTS.

No. 17.

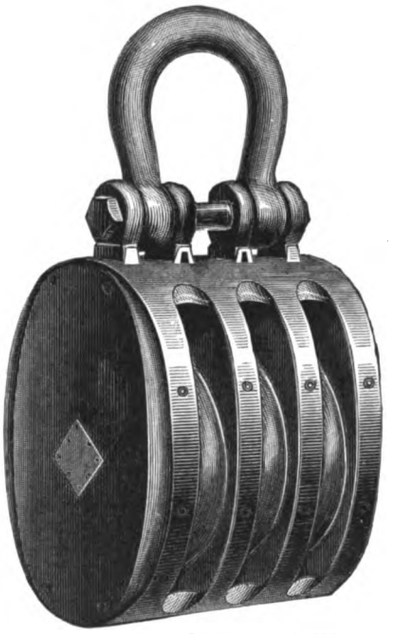
Improved Self-Adjusting Roller Bushing with Five Rolls.

No. 124.



No. 125.

Heavy Wrought Iron Blocks for Wire Rope.



No. 14. HARCOURT'S PATENT.

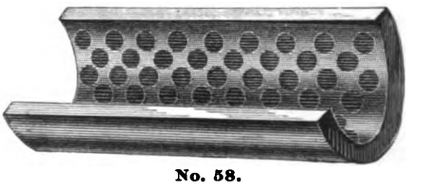
Extra Heavy Lashing Shackle.

No. 108. No. 109.

New Steel Blocks.

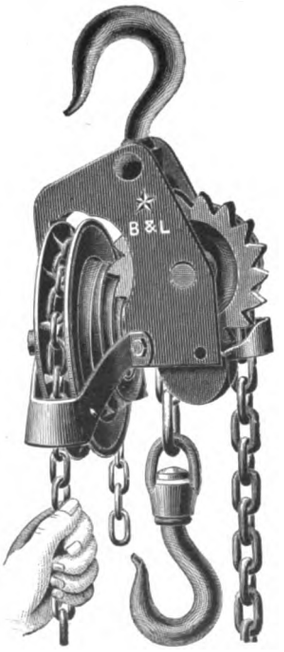
Lightest and Strongest.

ONE-HALF OF BUSHING.



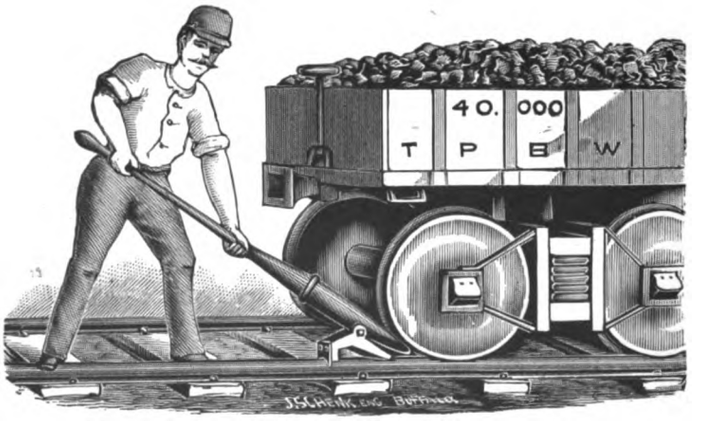
No. 58.

Self-Lubricating Metaline Bushing.



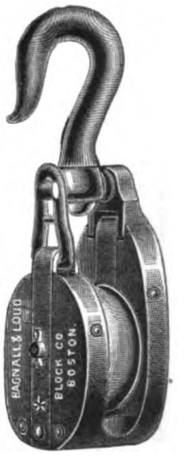
No. 127.

Batt's Patent Differential Pulley Block.



No. 142.

Giant Car Pusher.



No. 18.

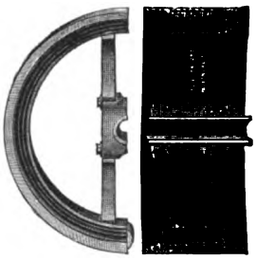
Improved Self-Locking Link Snatch Block.

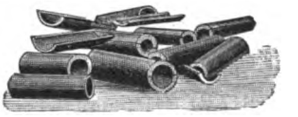
IN ORDERING BLOCKS, SPECIFY FOR THE "STAR" BRAND.

DODGE

"Independence" Patent Wood Separable or Split Pulleys.

Best Belt Surface; Lightest, Strongest, Best Shaft Fastening; Best Balanced and Most Convenient Pulley in the World.





WITH OUR PATENT BUSHING SYSTEM

Every pulley will fit twenty-two different sizes of shafting, and guaranteed to give from 30 to 60 per cent. more power from same belt and like tension than any iron or steel pulley. Every pulley a Split Pulley, 70 per cent. lighter than cast iron and 50 per cent. lighter than wrought iron or steel. Strong enough for any power required. Made in any size from 9 inches to 30 feet diameter. Any width face.

IMPORTANT NOTICE TO

PURCHASERS AND CONSUMERS OF PULLEYS.

Notwithstanding statements to the contrary, DODGE MANUFACTURING CO. is in no way connected with the MILBURN GIN AND MACHINE CO. T. H. and J. D. MILBURN have assured their customers and the trade that they have rights in all the Patents acquired by us since February, 1885, but their suit to enforce said claim has been dismissed for want of equity. MILBURN GIN AND MACHINE CO. are, therefore, infringing said Patents, and suits against them are pending.

TAKE NOTICE.

WE shall vigorously prosecute any and all infringers, and hereby warn all persons interested that pulleys made by said MILBURN GIN AND MACHINE CO. and others, as they are now constructing them, can only be purchased with legal risks attached. That intending purchasers may be fully warned we have caused our Trade Mark to be stamped upon the hub of each and every pulley.

GOOD THINGS ARE IMITATED.

THE Independence Wood Split Pulley with Bushing System originated with us and we are protected by twenty-three patents in the United States and seven in Canada. Many base imitations have recently been thrown upon the market which are infringements of our rights. Remember that it is unsafe to buy or use such goods for the law equally prohibits making, using or selling a patented article without consent of the owner.

BELOW IS A LIST OF OUR SALES AGENTS WITH WHOM YOU CAN DEAL SAFELY. THEY ALL CARRY LARGE STOCKS AND CAN FILL ORDERS PROMPTLY.

WM. H. TAYLOR, ... 22 Cortlandt Street, New York City.
UNDERWOOD MFG. CO., ... 135 Pearl Street, Boston, Mass.
A. B. PITKIN, ... 4 to 12 Cove Street, Providence, R. I.
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BERRY & ORTON, ATLANTIC WORKS, 22d St., above Arch, Philadelphia, Pa.
SCRANTON SUPPLY AND HARDWARE CO., 131 Wyoming Avenue, Scranton, Pa.
FAIRBANKS & CO., ... 382 Broadway, Albany, N. Y.
FAIRBANKS & CO., ... 216 Main Street, Buffalo, N. Y.
S. M. YORK, ... 42 and 44 S. Water Street, Cleveland, Ohio.
BROWNELL & CO., ... 437 E. Third Street, Dayton, Ohio.
HERBERT BAKER, ... 98 and 100 Erie Street, Toledo, Ohio.
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COOLEY & VATER, . 224 Washington Avenue S., Minneapolis, Minn.
BROWNELL & CO., ... 1213 Leavenworth Street, Omaha, Neb.
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HENDRIE & BOLTHOFF MFG. CO., Wazee St., corner 17th, Denver, Col.
GEO. M. SCOTT & CO., ... Salt Lake City, Utah.
JOHN SIMONDS, . . 511 and 513 Mission Street, San Francisco, Cal.
C. L. RICE, Manager Chicago Office, . . 63 and 65 S. Canal Street.
F. C. CANNON MFG. CO., . . 45 Orange Street, New Haven, Conn.
WATERS & GARLAND, . . . 433 Main Street, Louisville, Ky.
LARENDON & CO., ... 174 Common Street, New Orleans, La.
J. S. GRAHAM & CO., Lyell Avenue, corner West Street, Rochester, N. Y.
WM. H. TAYLOR & CO., ... Allentown, Pa.
U. BAIRD MACHINERY CO., . . 75 Water Street, Pittsburgh, Pa.
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JOSEPH SHARP, . . . 59 & 61 Walnut Street, Cincinnati, Ohio.

DODGE MANUFACTURING CO.,

MISHAWAKA, IND., U. S. A.

Sole Manufacturers. No Licensees.

Address all Communications and Orders as above. **Chicago Branch: 63 and 65 South Canal St.**

SIMPLEST AND BEST!

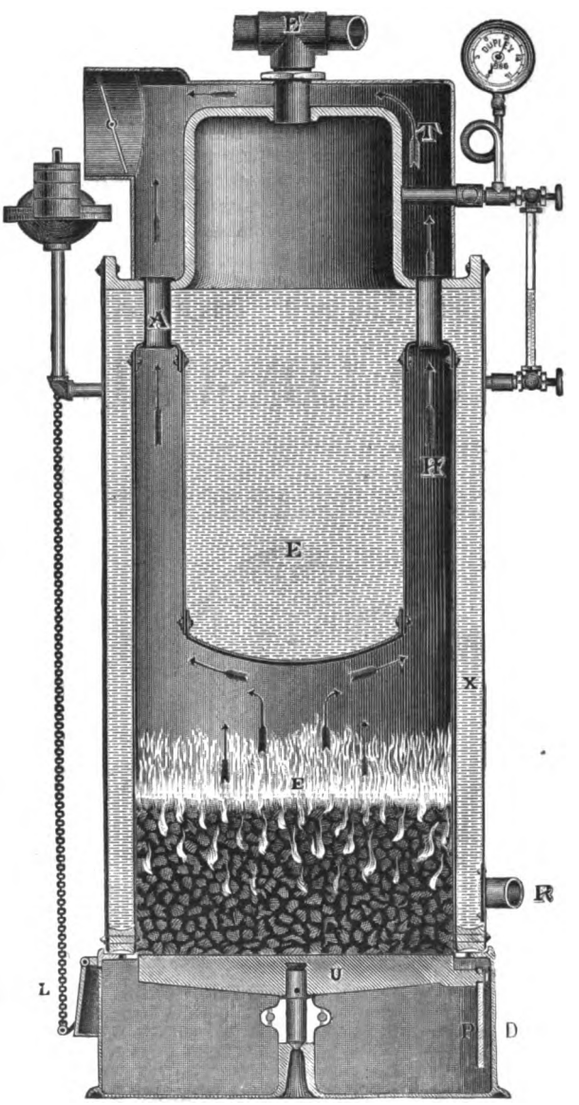
Always Gives Satisfaction!

LARGEST
STEAMING
CAPACITY.

GREATEST
ECONOMY
IN FUEL.

BURNS EITHER
HARD OR
SOFT COAL.

Agents wanted in the Trade everywhere.



PERFECT
LOW PRESSURE
STEAM HEATING
FOR STORES,
DWELLINGS,
BANKS AND
PUBLIC BUILDINGS.

MANUFACTURERS UNDER
FISKES' PATENTS.

Send for Illustrated Catalogue and References.

DUPLEX STEAM HEATER CO.

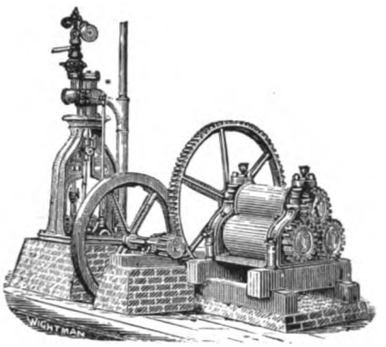
10 Barclay Street, New York.

THE GEO. L. SQUIER MFG. CO.,

BUFFALO, N. Y., U. S. A.,

SOLE MANUFACTURERS OF THE CELEBRATED

American Cane, Rice and Coffee Machinery.



FLORIDA CANE MILL WITH VERTICAL ENGINE.

EIGHTY SIZES

—OF—

Cane Mills, Vacuum Pans

—AND—

PUMPS.

No. 1 COFFEE HULLER.

Bone Coal Filters and Kilns, Mixers, Centrifugals, Evaporators, &c.

RICE AND COFFEE HULLERS, SEPARATORS, WASHERS,
SCOURERS AND POLISHERS.

Engines, Horse Powers, Boilers, &c.

—THE—

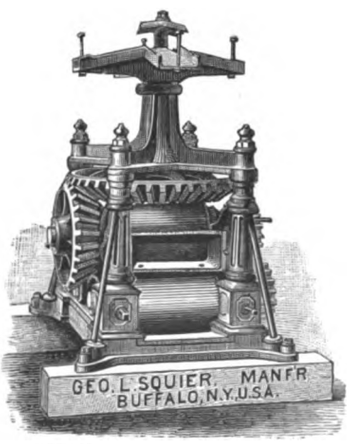
HERCULES WIND ENGINE.

THE MOST RELIABLE,
DURABLE AND EFFECTIVE
WIND ENGINE
FOR POWER AND PUMPING
PURPOSES EVER
PLACED UPON THE MARKET.

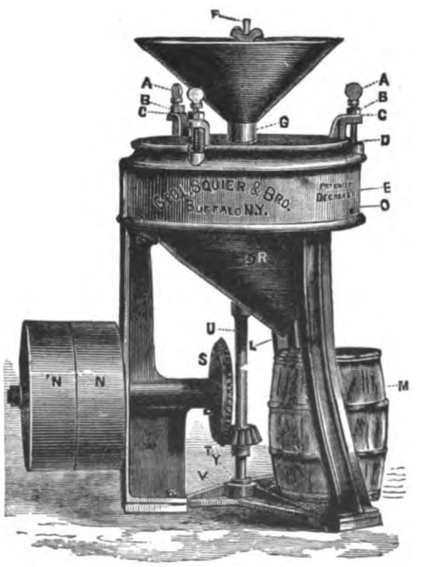
SEND FOR CATALOGUE.

☞ Information and Prices given on all classes of Machinery.

CORRESPONDENCE SOLICITED.



HORIZONTAL CANE MILL "PEARL."
The best Horse Power Mill in the World. Six Sizes.



RICE HULLER No. X.
Capacity, 100 Bushels of Rice per day.

12,500,000 SQUARE FEET OF

BUNDY STEAM AND HOT WATER RADIATORS

Now in use, heating over 10,000 of the finest buildings in the land, should convince anybody that the **BUNDY IS THE BEST.**

WHY?

1st.—It is the most effective.

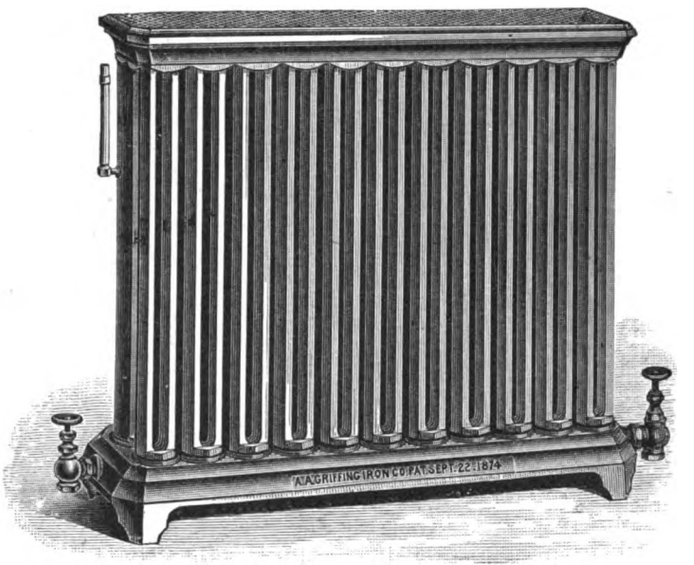
2d.—All first-class Architects endorse and specify it.

3d.—It is the most simple.

4th.—It is the most durable.

5th.—It never leaks or gets out of order.

6th.—It is made in greater variety than any other.



BUNDY DIRECT RADIATOR.

WE CAUTION!

All dealers and users of heating apparatus not to buy any Radiators which infringe on our patents. Our rights have been established at a large expense, and it is our purpose to protect them in every instance.

SYRACUSE, N. Y., April 24, 1888.

A. A. Griffing Iron Co., Jersey City, N. J.:

GENTLEMEN—We take great pleasure in recommending the BUNDY RADIATOR, as we have placed a great number of them on some of the largest steam heating contracts in the United States, and also sold them in large quantities for the past five years, and can state *most emphatically* there is no radiator manufactured superior to the "BUNDY." It certainly has a *universal reputation* and is given the preference over most radiators. We can also particularly recommend your Hot Water Radiator, it being a *positive circulator*, and is a pronounced success for both hot water and hot water and steam combined. It also gives us great pleasure to state that there is comparatively *no complaint* concerning the construction of your Radiator, or metal in same, as regards its durability, and we can most cordially recommend your goods to anyone who is in search of the most perfect and complete radiator manufactured. Yours very truly,

PIERCE, BUTLER & PIERCE MFG. CO.,

WASHINGTON, D. C., August 29, 1888.

A. A. Griffing Iron Co., Jersey City, N. J.:

GENTLEMEN—In reply to your favor of the 24th inst. we would say we have used the BUNDY RADIATORS *exclusively*, both direct and indirect, for *steam* and *hot water* in our work since we started business, amounting to many *thousand feet* of surface, and always found they gave *perfect satisfaction*, being *compact*, *effective* and *ornamental* and *circulating easily*. We specify the "BUNDY" in all of our estimates. We recommend all persons contemplating putting in an apparatus to examine the "BUNDY" before ordering elsewhere. Our dealings with your firm have always been *most satisfactory* and our orders shipped promptly and correctly.

Yours respectfully,

EDWARD L. DENT & CO.

BUNDY ÉLITE AND BUNDY TRIUMPH RADIATORS

Are the ONLY Radiators having THREE PIPES OR TUBES, and all other goods of this description ARE INFRINGEMENTS. The BUNDY ÉLITE Radiator, with its ARABESQUE DESIGN, has been pronounced the handsomest Radiator on the market. It is specially desirable for Moorish, Oriental and Queen Anne rooms.

The BUNDY DINING ROOM HOT CLOSET RADIATOR is a valuable acquisition in any household.

MANUFACTURED BY

A. A. GRIFFING IRON CO.,

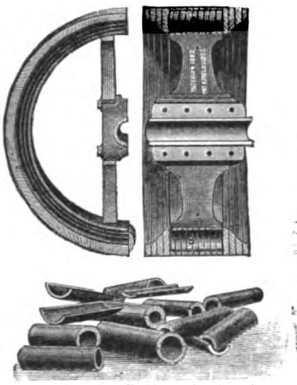
No. 776 Communipaw Avenue, Jersey City, N. J.

MILBURN GIN AND MACHINE CO.

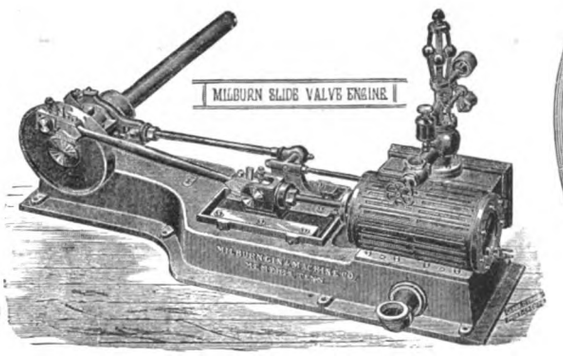
OFFICE AND WORKS:

No. 139 South Broadway, Memphis, Tenn., U. S. A.

THE LARGEST AND FINEST WORKS OF THE KIND IN AMERICA.



Wood Split Pulleys in Stock.



MILBURN'S

Patent Wood Split Pulleys.

Wood Pulleys are rapidly superseding iron. They are light to handle; perfect friction; require no key seating; have no set screws, and, being split, are put on shafting without taking down.

Wooden Sleeves or Bushings are furnished at slight cost, adapting any pulley to various diameters of shafts.

The Best and Cheapest Engine

IN THE MARKET.

Engines and Boilers, from 15 H. P. to 120 H. P., always in stock, ready for immediate delivery.

Can furnish Steel and Iron Boilers of all Sizes and Descriptions on short notice.

MILBURN'S

Patent Wood Rim Pulleys

ARE ALL SPLIT PULLEYS.

Consider this when you compare prices with others which are for solid rims.

Use the Milburn Pulley. No shaft to take down. No key seat to cut. No set screws to twist off.

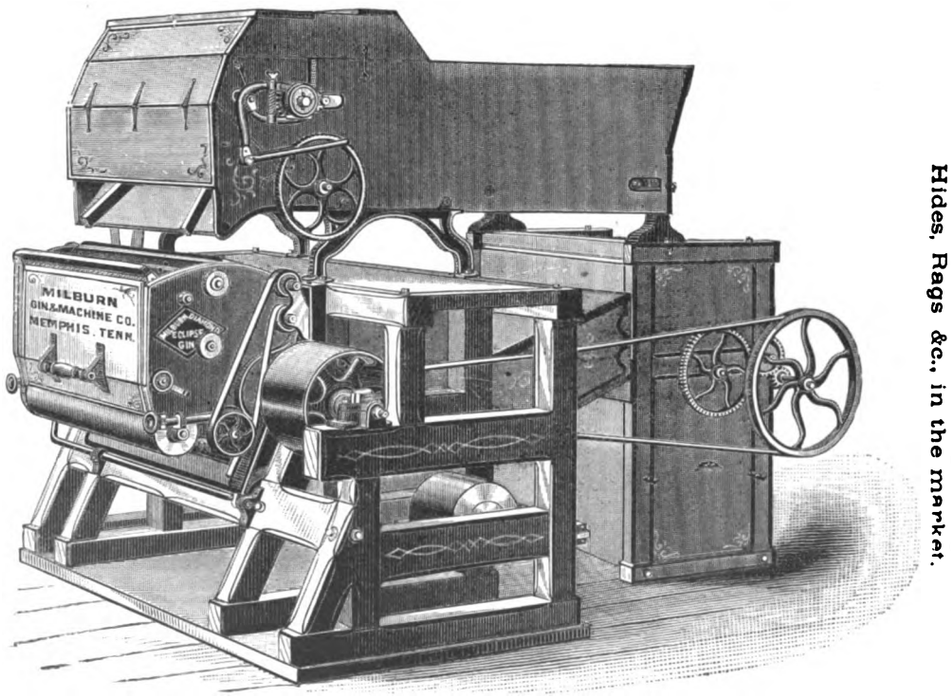
Best made and finished Wood Split Pulley in the market.

THE ONLY HOUSE IN AMERICA MANUFACTURING A COMPLETE GINNING OUTFIT.

MILBURN'S

Eclipse Hulling Gin

Has no equal for trashy Cotton. It runs light, cleans the seed well and improves the staple.



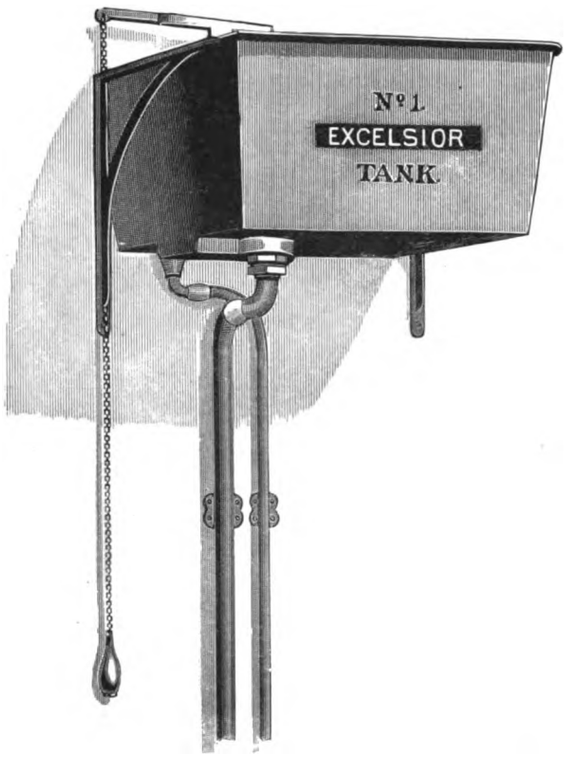
MILBURN ECLIPSE GIN.

MILBURN'S

Improved Little Giant Hydraulic Baling Press.

The most complete Press for packing Cotton, Hides, Rags &c., in the market.

WRITE FOR PRICES AND DISCOUNTS.



WEEDEN'S AEIDA,

OR

INVISIBLE WASHOUT CLOSET,

SET UP WITH

EXCELSIOR SURE SUPPLY TANK, No. 1

Send for Catalogues of WEEDEN'S Sanitary Water Closet Appliances and Plumbing Supplies.

HENRY C. WEEDEN,

MANUFACTURER AND WHOLESALE DEALER IN

FINE PLUMBING SUPPLIES

OF EVERY DESCRIPTION.

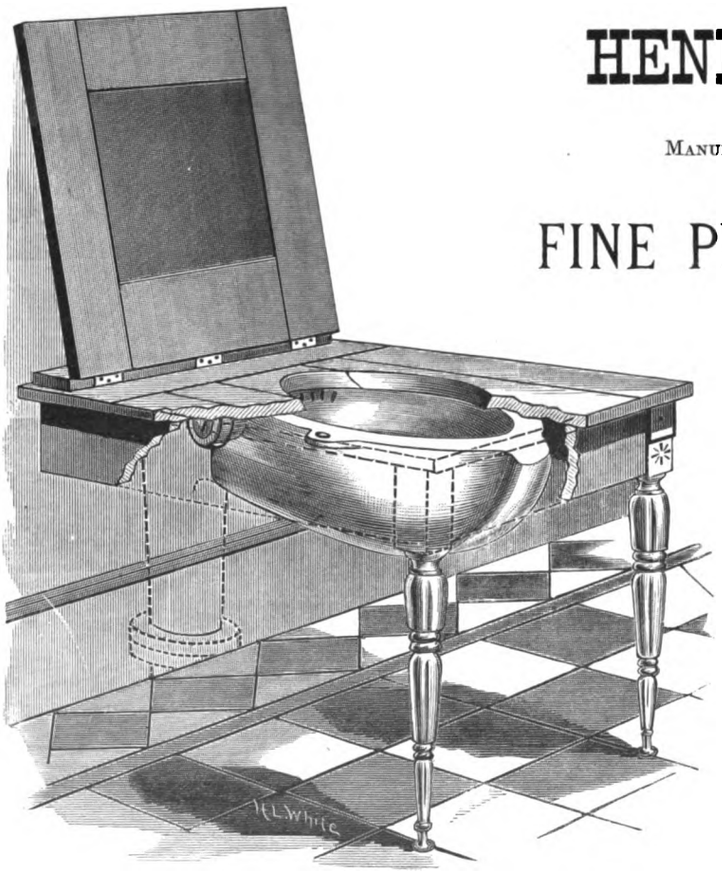
84 NORTH STREET,

AND

16 NORTH CENTRE STREET,

BOSTON, MASS.,

U. S. A.



Sectional view, showing Aeida, or Invisible Washout, set up with Tiled Floor and Panelled Lid, Open Woodwork, Polished Brass Legs.

UNION MANUFACTURING CO.,

New Britain, Conn.,

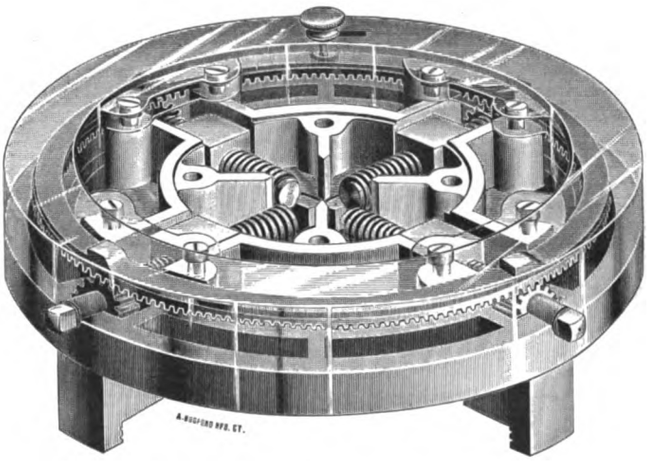
MANUFACTURERS OF ALL KINDS OF

LATHE CHUCKS,

Skinner Patent Combination, Union Mfg. Co.'s Universal and Union Mfg. Co.'s Independent with Reversible Jaws.

ALL CHUCKS GUARANTEED.

FIG. 68.
HAND FORCE PUMP.



CUT SHOWING WORKING PARTS.

FIG. 114.
HAND FORCE PUMP.

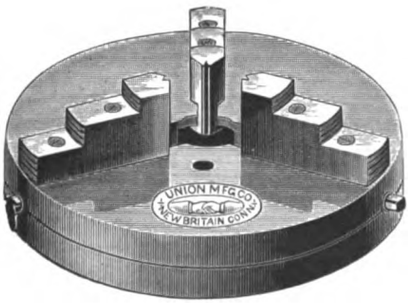
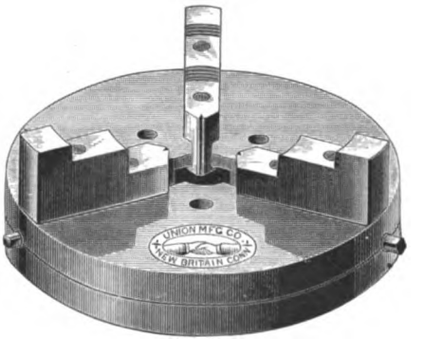


FIG. 3.
CISTERN PUMP.



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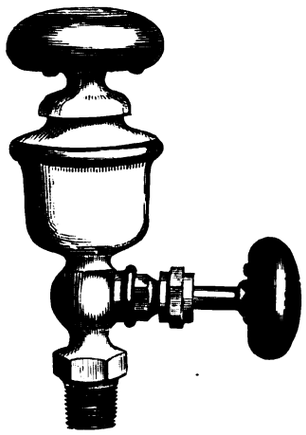

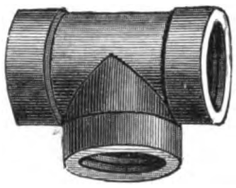

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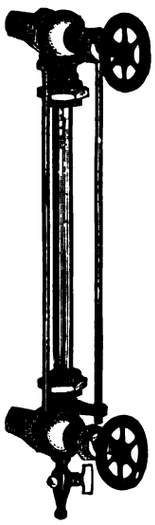

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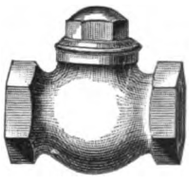

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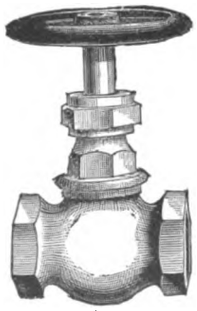

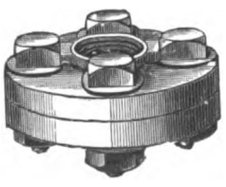

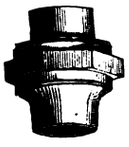

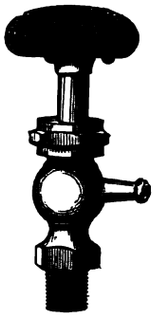

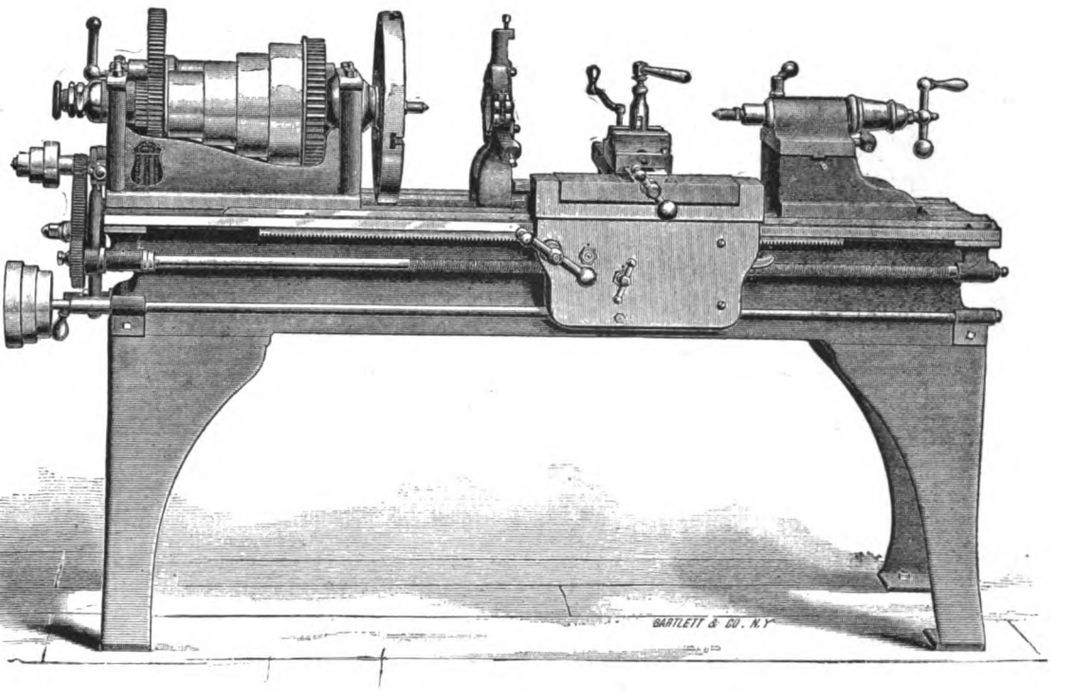

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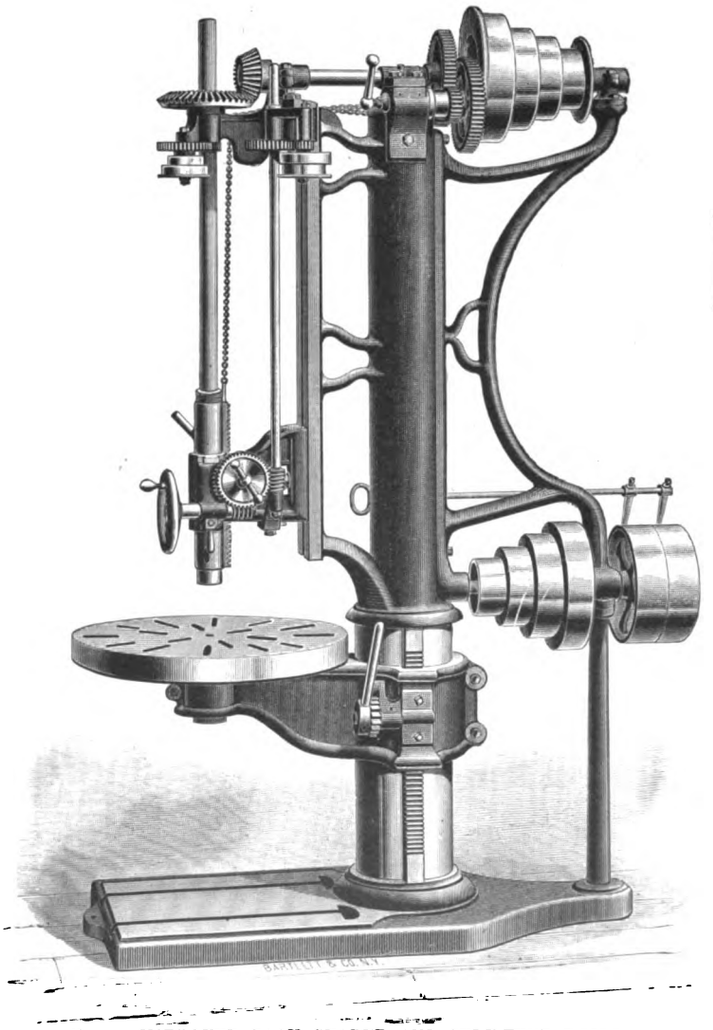

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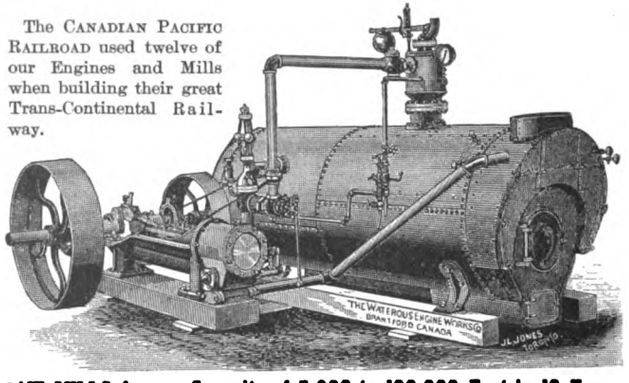

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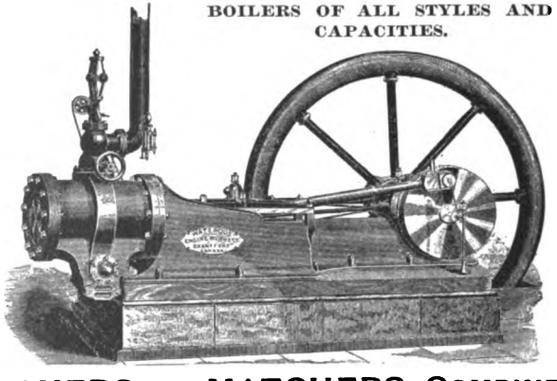

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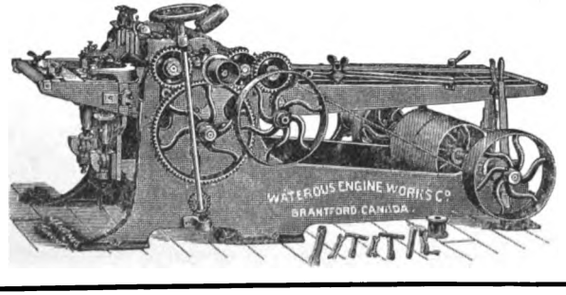

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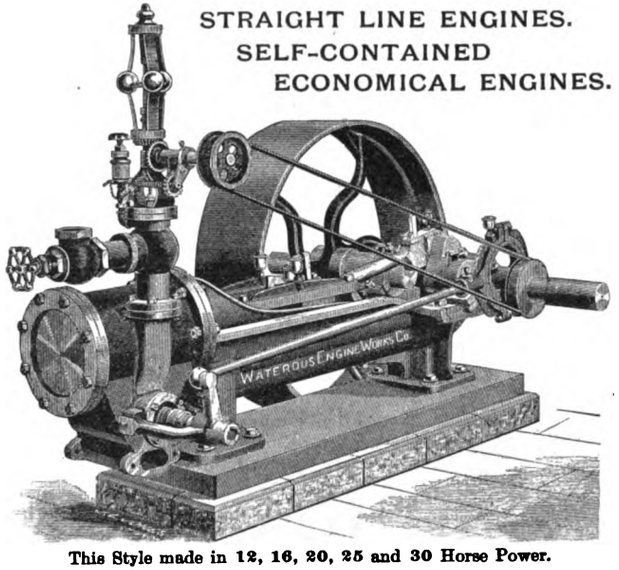

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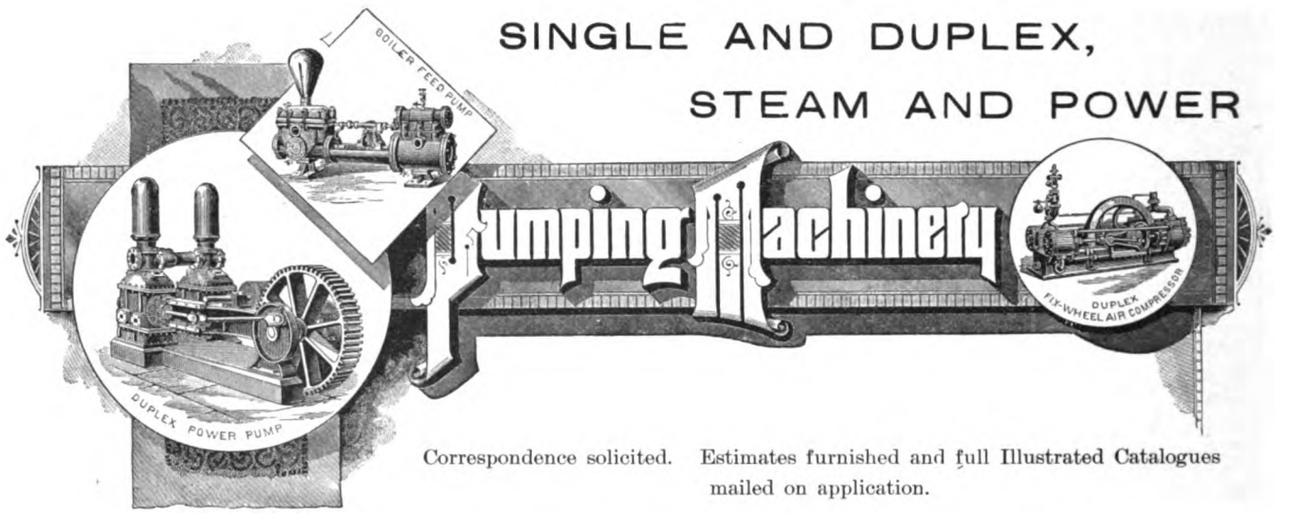

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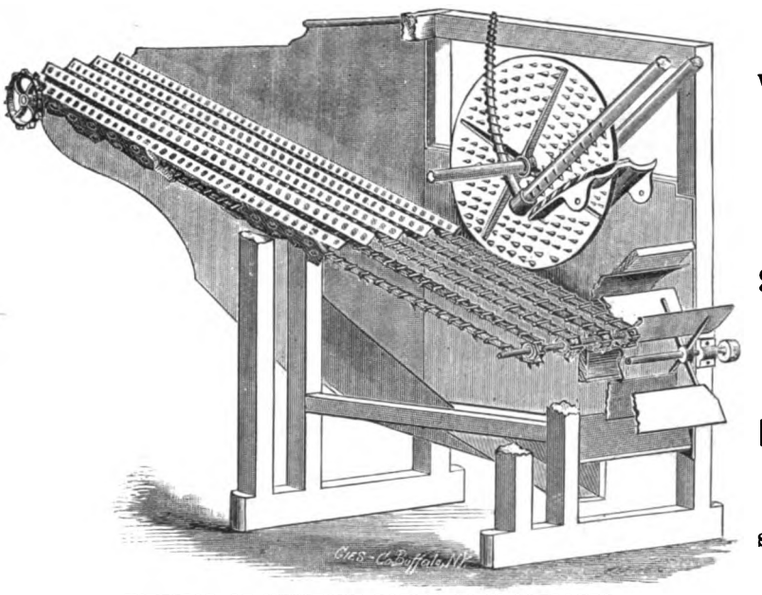

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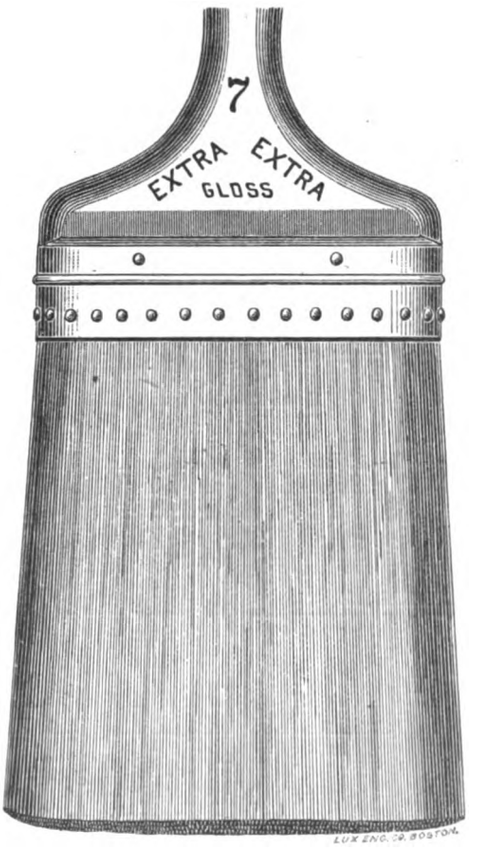

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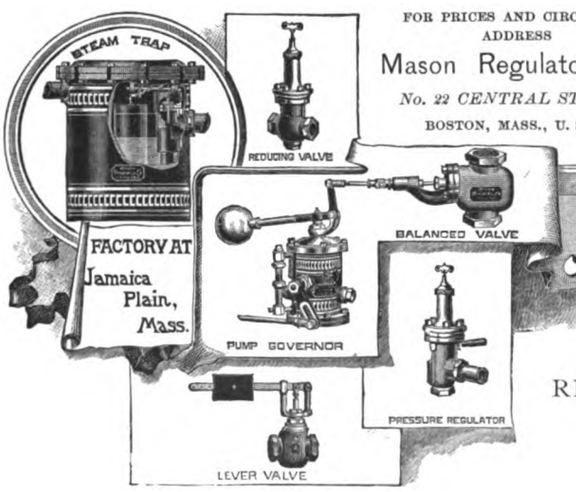

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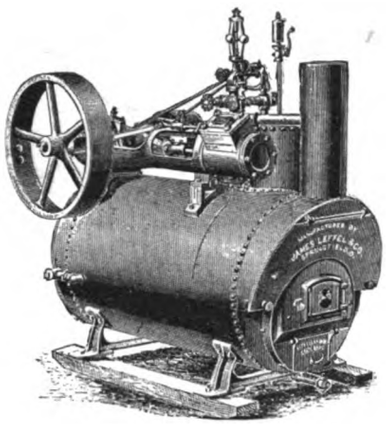

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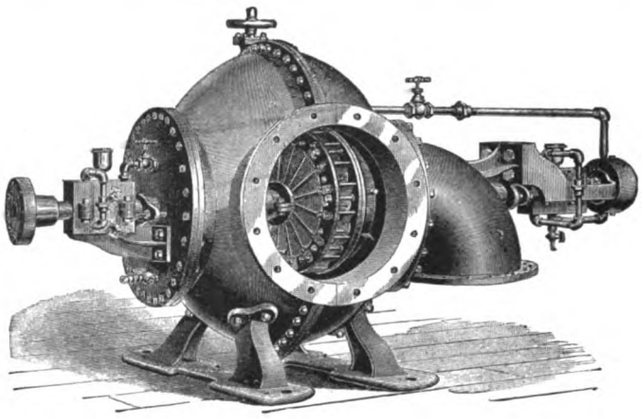

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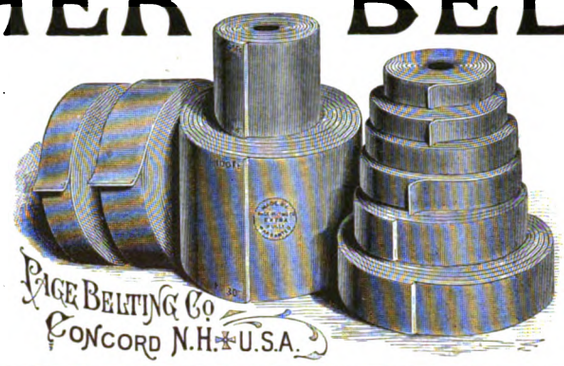

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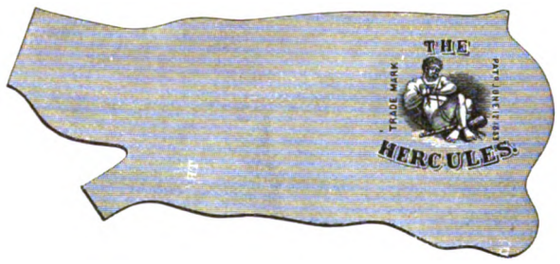

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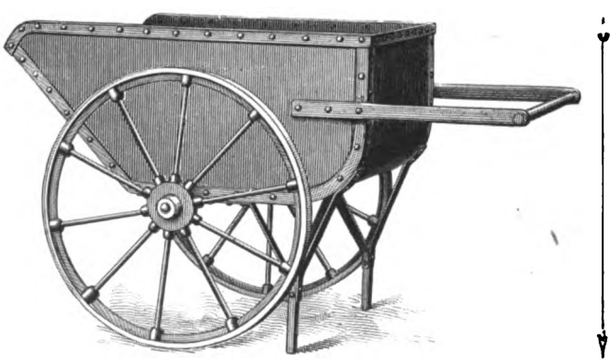

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